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TRANSACTIONS

OF THE

ROYAL ASIATIC SOCIETY

OF

GREAT BRITAIN AND IRELAND.

VOL. II.—PART I.

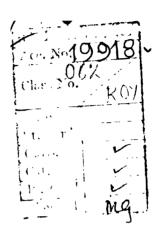
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TRANSACTIONS

OF THE

ROYAL ASIATIC SOCIETY.

I. Essay on the Philosophy of the Hindus. Part V. By HENRY THOMAS COLEBROOKE, Esq., Dir. R.A.S.

Read April 7th, 1827.

INTRODUCTION.

A preceding essay on Indian philosophy* contained a succinct account of the Carma-mimánsá. The present one will be devoted to the Brahma-mimánsá; which, as the complement of the former, is termed uttara, later, contrasted with púrva, prior, being the investigation of proof deducible from the védas in regard to theology, as the other is in regard to works and their merit. The two together, then, comprise the complete system of interpretation of the precepts and doctrine of the védas, both practical and theological. They are parts of one whole. The later mimánsá is supplementary to the prior, and is expressly affirmed to be so: but, differing on many important points, though agreeing on others, they are essentially distinct in a religious as in a philosophical view.

The ordinary designation of the uttara mimansa is védánta, a term likewise of more comprehensive import. It literally signifies "conclusion of the véda," and bears reference to the upanishads, which are, for the most part, terminating sections of the védas to which they belong. It implies, however, the doctrine derived from them, and extends to books of sacred

authority, in which that doctrine is thence deduced; and in this large acceptation, it is "the end and scope of the védas."

The followers of the *védánta* have separated in several sects, as 'ancient' and 'modern' *védántins*, and bearing other designations. The points on which they disagree, and the difference of their opinions, will not be a subject of the present essay, but may be noticed in a future one.

Among numerous upanishads, those which are principally relied upon for the védánta, and which accordingly are most frequently cited, are the Ch'hándógya, Caushítací, Vrihad-aran'yaca, Aitaréyaca, Taittiríyaca, Cát'haca, Cat'havallí, Muńd'aca, Pras'na, Swétás'watara; to which may be added the I'ś á-vásya, Céna, and one or two more.

Certain religious exercises, consisting chiefly in profound meditation, with particular sitting postures rigorously continued, are inculcated as preparing the student for the attainment of divine knowledge, and promoting his acquisition of it. Directions concerning such devout exercises are to be found in several of the *upanishads*, especially in the S'wétás'watara; and likewise in other portions of the védas, as a part of the general ritual. These are accordingly cited by the commentators of the védánta; and must be considered to be comprehended under that general term;* and others from different sáchas of the védas, as further exemplified in a note below.†

Besides the portion of the védas understood to be intended by the designation of védánta, the grand authority for its doctrine is the collection of sútras, or aphorisms, entitled Brahme-sútra or S'áríraca mímánsá, and sometimes S'áríra-sútra or Védánta-sútra. S'áríra, it should be observed, signifies embodied or incarnate (soul).

Other authorities are the ancient scholia of that text, which is the standard work of the science; and didactic poems comprehended under the designation of smriti, a name implying a certain degree of veneration due to the authors. Such are the Bhagavad gitá and Yoga-vasishi'ha, reputed to be inspired writings.

^{*} For instance, the Agni rahasya bráhmana of the Cánwas and of the Vájins (or Vájas'aníyins); the Rahasya bráhmana of the Tándins and of the Paingins.

[†] The Udgítha-bráhmana of the Vájas'anéy'ins, the Panchágni-vidyá-pracaran'a of the same, the C'hila grant'ha of the Rán'áyan'yas, the Prán'a samváda or Prán'a vidyá, Dahara vidyá, Hárda vidyá, Paramátma-vidyá, Satya vidyá, Vais'wánara-vidyd, Sán'dilya-vidyá, Vámadévya vidyá, Upacós'ala-vidyá, Paryanca-vidyá, Madhú-vidyá, Shód'as'acala-vidyá, Samvarga-vidyá, &c.

Writers on the VEDANTA.

The S'áriraca mimánsá or Brahme-sútra, above-mentioned, is a collection of succinct aphorisms attributed to Bádaráyana, who is the same with Vyása or Véda-vyúsa; also called Dwaipúyana or Crishn'a-dwaipúyana. According to mythology, he had in a former state, being then a bráhmana bearing the name of Apántara-tamas,* acquired a perfect knowledge of revelation and of the divinity, and was consequently qualified for eternal beatitude. Nevertheless, by special command of the deity, he resumed a corporeal frame and the human shape, at the period intervening between the third and fourth ages of the present world, and was compiler of the védas, as his title of Vyása implies.

In the Purdn'as, and by Parás'ara, he is said to be an incarnation (avatdra) of Vishňu. This, however, is not altogether at variance with the foregoing legend; since Apántara-tamas, having attained perfection, was identified with the deity; and his resumption of the human form was a descent of the god, in mythological notions.

Apart from mythology, it is not to be deemed unlikely, that the person (whoever he really was) who compiled and arranged the rédas, was led to compose a treatise on their scope and essential doctrine. But Vyása is also reputed author of the Mahábhárata, and most of the principal purán'as; and that is for the contrary reason improbable, since the doctrine of the purán'as, and even of the Bhagavad gítá and the rest of the Mahábhárata, are not quite consonant to that of the védas, as expounded in the Brahme sútras. The same person would not have deduced from the same premises such different conclusions.

The name of BADARÁYANA frequently recurs in the sútras ascribed to him, as does that of Jaimini, the reputed author of the Púrva mímánsá, in his. I have already remarked, in the preceding essay,† on the mention of an author by his name, and in the third person, in his own work. It is nothing unusual in literature or science of other nations: but a Hindu commentator will account for it, by presuming the actual composition to be that of a disciple recording the words of his teacher.

Besides Bádaráyana himself, and his great predecessor Jaimini, several other distinguished names likewise occur, though less frequently: some which are also noticed in the *Púrva-mímánsá*, as Atréví and Bádari; and

^{*} S'anc. &c. on Br. Sútr. 3. 3. 32.

some which are not there found, as Asmarat'hya, Aud'ulómi, Cárshúa-Jini, and Cásacrítsna; and the Yóga of Patanjali, which consequently is an anterior work; as indeed it must be, if its scholiast, as generally acknowledged, be the same Vyása who is the author of the aphorisms of the Uttara mímánsú.

The S'áríraca is also posterior to the atheistical Sánc'hya of CAPILA, to whom, or at least to his doctrine, there are many marked allusions in the text.

The atomic system of Cańade (or, as the scholiast of the S'áríraca, in more than one place, contumeliously designates him, Cańa-bhacsha) is frequently adverted to for the purpose of confutation; as are the most noted heretical systems, viz. the several sects of Jainas, the Bauddhas, the Pásupatas with other classes of Máhéśwaras, the Páncharátras or Bhágavatas, and divers other schismatics.

From this, which is also supported by other reasons, there seems to be good ground for considering the S'áriraca to be the latest of the six grand systems of doctrine (darsana) in Indian philosophy: later, likewise, than the heresies which sprung up among the Hindus of the military and mercantile tribes (cshatriya and vaisya) and which, disclaiming the Védas, set up a Jina or a Buddha for an object of worship; and later even than some, which, acknowledging the Védas, have deviated into heterodoxy in their interpretation of the text.

In a separate essay,* I have endeavoured to give some account of the heretical and heterodox sects which the S'áriraca confutes; and of which the tenets are explained, for the elucidation of that confutation, in its numerous commentaries. I allude particularly to the Jainas, Bauddhas, Chárvácas, Pásupatas, and Páncharátras.

The sútras of BADARÁYANA are arranged in four books or lectures (ádhyáya), each subdivided into four chapters or quarters (páda). Like the aphorisms of the prior mímánsá, they are distributed very unequally into sections, arguments, cases, or topics, (adhicurana.) The entire number of sútras is 555; of adhicaranas, 191. But in this there is a little uncertainty, for it appears from S'ANCARA, that earlier commentaries subdivided some adhicaranas, where he writes the aphorisms in one section.

An adhicaran'a in the later, as in the prior mimánsa, consists of five members or parts: 1st. the subject and matter to be explained; 2d. the

doubt or question concerning it; 3d. the plausible solution or prima fucie argument: 4th. the answer, or demonstrated conclusion and true solution; 5th. the pertinence or relevancy and connexion.

But in Bádaráyańa's aphorisms, as in those of Jaimini, no adhicaran'a is fully set forth. Very frequently the solution only is given by a single sútra, which obscurely hints the question, and makes no allusion to any different plausible solution, nor to arguments in favour of it. More rarely the opposed solution is examined at some length, and arguments in support of it are discussed through a string of brief sentences.

Being a sequel of the prior mimánsá, the latter adopts the same distinctions of six sources of knowledge or modes of proof which are taught by Jaimin, supplied where he is deficient by the old scholiast. There is, indeed, no direct mention of them in the Brahme-sútras, beyond a frequent reference to oral proof, meaning revelation, which is sixth among those modes. But the commentators make ample use of a logic which employs the same terms with that of the púrva mimánsa, being founded on it, though not without amendments on some points. Among the rest, the Védántins have taken the syllogism (nyáya) of the dialectic philosophy, with the obvious improvement of reducing its five members to three.† "It consists," as expressly declared, "of three, not of five parts; "for as the requisites of the inference are exhibited by three members, "two more are superfluous. They are either the proposition, the reason, and the example; or the instance, the application, and the conclusion."

In this state it is a perfectly regular syllogism, as I had occasion to remark in a former essay;‡ and it naturally becomes a question, whether the emendation was borrowed from the Greeks, or being sufficiently obvious, may be deemed purely Indian, fallen upon without hint or assistance from another quarter. The improvement does not appear to be of ancient date, a circumstance which favours the supposition of its having been borrowed. The earliest works in which I have found it mentioned are of no antiquity.§

The logic of the two mimánsás merits a more full examination than the limits of the present essay allow, and it has been reserved for a separate consideration at a future opportunity, because it has been refined and

[·] Védánta Paribháshá.

[‡] Vol. i. p. 116.

⁺ V. Paribháshá.

[§] In the Védunta Paribhásha and Padartha dípica.

brought into a regular form by the followers, rather than by the founders of either school.

The śáriraca sútras are in the highest degree obscure, and could never have been intelligible without an ample interpretation. Hinting the question or its solution, rather than proposing the one or briefly delivering the other, they but allude to the subject. Like the aphorisms of other Indian sciences, they must from the first have been accompanied by the author's exposition of the meaning, whether orally taught by him or communicated in writing.

Among ancient scholiasts of the Brahme-sútras the name of Baudháyana occurs: an appellation to which reverence, as to that of a saint or rīshi, attaches. He is likewise the reputed author of a treatise on law. An early gloss, under the designation of vrǐtti, is quoted without its author's name, and is understood to be adverted to in the remarks of later writers, in several instances, where no particular reference is however expressed. It is apparently Baudháyana's. An ancient writer on both mimánsás (prior and later) is cited, under the name of Upavarsha, with the epithet of venerable (bhagavat),* implying that he was a holy personage. He is noticed in the supplement to the Amera-coshat as a saint (muni), with the titles or additions of Hala-bhrǐti, Crīta-cot'i, and Ayachita. It does not appear that any of his works are now forthcoming.

The most distinguished scholiast of these sútras, in modern estimation, is the celebrated S'ancara áchárva, the founder of a sect among Hindus which is yet one of the most prevalent. I have had a former occasion of discussing the antiquity of this eminent person; and the subject has been since examined by Ráma móhen ráva and by Mr. Wilson.‡ I continue of opinion, that the period when he flourished may be taken to have been the close of the eighth or beginning of the ninth century of the Christian era; and I am confirmed in it by the concurring opinions of those very learned persons.

How much earlier the older scholia were, or the text itself, there is no evidence to determine. If the reputed author be the true one, it would be necessary to go back nearly two thousand years, to the era of the arrangement of the védas by Vyása.

S'ANCARA's gloss or perpetual commentary of the sútras bears the title of

^{*} Sanc. 3. 3. 53.

S'driraca-mimánsá-bháshya. It has been annotated and interpreted by a herd of commentators; and among others, and most noted, by VACHESPATI MIS'RA, in the Bhámati or S'driraca-bháshya-vibhága.

This is the same VACHESPATI, whose commentaries on the Sánc'hya-cdricá of Is'wara chandra, and on the text and gloss of Patanjali's Yoga and Gótama's Nyáya, were noticed in former essays.* He is the author of other treatises on dialectics (Nyáya), and of one entitled (Tatwa-vindu) on the púrva mímánsá, as it is expounded by Bhat't'a. All his works, in every department, are held in high and deserved estimation.

VÁCHESPATI'S exposition of S'ANCARA'S gloss, again, has been amply annotated and explained in the Védánta-calpataru of ANALÁNANDA, surnamed Vyásáśrama; whose notes, in their turn, become the text for other scholia: especially a voluminous collection under the title of Parimala, or Védánta-calpataru-parimala, by APYÁYA-DÍCSHITA (author of several other works); and an abridged one, under that of Védánta-calpataru-manjarí, by VIDYÁNÁT'HA-BHAT'T'A.

Other commentaries on S'ANCARA's gloss are numerous and esteemed, though not burdened with so long a chain of scholia upon scholia: for instance, the *Brahma-vidyábharana* by ADWAITÁNANDA,† and the *Bhdshya-ratna-prabhá* by GÓVINDÁNANDA: both works of acknowledged merit.

These multiplied expositions of the text and of the gloss furnish an inexhaustible fund of controversial disquisition, suited to the disputatious schoolmen of India. On many occasions, however, they are usefully consulted, in succession, for annotations supplying a right interpretation of obsure passages in S'ancara's scholia or in Vyasa's text.

Another perpetual commentary on the sútras of the S'driraca by a distinguished author, is the work of the celebrated Rámánuja, the founder of

^{*} Vol. i. pp. 24, 25, 93.

[†] It is by Mr. Ward named védánta sútra vyác'hyá by BRAHME-VIDYÁBHARAN'A, mistaking the title of the work for the appellation of the author. Yet it is expressly affirmed in the rubric and colophon to be the work of Adwaitánanda, who abridged it from an ampler commentary by Rámánanda Tírt'ha. The mistake is the more remarkable, as the same Adwaitánanda was preceptor of Sadánanda, whose work, the védánta-sára, Mr. Ward attempted to translate; and the only part of Sadánanda's preface, which is preserved in the version, is that preceptor's name. Mr. Ward's catalogue of treatises extant belonging to this school of philosophy exhibits other like errors. He puts Mádhava for Madhusúdana, the name of an author; converts a commentary (the muctávalí) into an abridgment; and turns the text (múla) of the védánta-sára into its essence. Ward's Hindus, vol. iv. pp. 172, 173.

a sect which has sprung as a schism out of the Védántin. The points of doctrine, on which these great authorities differ, will be inquired into in another place. It may be readily supposed that they are not unfrequently at variance in the interpretation of the text, and I shall, therefore, make little use of the scholia of Rámánuja for the present essay. For the same reason, I make no reference to the commentaries of Ballabha A'chárya, Bhat't'a Bháscara, Ananta Tírt'ha surnamed Madhu, and Nílacant'ha, whose interpretations differ essentially on some points from S'ancara's.

Commentaries on the S'áríraca sútras by authors of less note are extremely numerous. I shall content myself with naming such only as are immediately under view, viz. the Védánta-sútra-muctávali by Brahmánanda-saraswatí; the Brahma-sútra-bháshya or Mímánsá-bháshya, by Bháscaráchárya; the Védánta-sútra-vyác'hyá-chandricá, by Bhavadéva mis'ra; the Vyása-sútra-vritti, by Ranganát'ha; the Subódhiní or S'áríra-sútra sárárt'ha chandricá, by Gangádhara; and the Brahmámrita-vershin'i, by Rámánanda.

This list might with ease be greatly enlarged. Two of the commentaries, which have been consulted in progress of preparing the present essay, are without the author's name, either in preface or colophon, in the only copies which I have seen; and occasions have occurred for noticing authors of commentaries on other branches of philosophy, as well as on the Brahma mimánsá (for instance, Vijnyána Bhicshu, author of the Sánc'hya-sára and Yóga-vártica).†

To these many and various commentaries in prose, on the text and on the scholia, must be added more than one in verse. For instance, the Sancshépa-s'áríraca, which is a metrical paraphrase of text and gloss, by Sarvajnyátma-gira a sannyási: it is expounded by a commentary entitled Anwayárt'ha-pracás'icá, by Ráma tírt'ha, disciple of Crisháa tírt'ha, and author of several other works; in particular, a commentary on the Upadéśa-sahasri, and one on the Védánta-sára.

Besides his great work, the interpretation of the sútras, S'ANCARA wrote commentaries on all the principal or important *Upanishads*. His preceptor, GÓVINDA, and the preceptor's teacher, GAUD'APÁDA, had already written commentaries on many of them.

S'ANCARA is author, likewise, of several distinct treatises; the most noted

[•] Mr. Ward calls this an abridgment of the Védánta-sútras. It is no abridgment, but a commentary in ordinary form.

+ Vol. i. p. 22.

of which is the *Upadés'a-sahasri*, a metrical summary of the doctrine deduced by him from the *Upanishads* and *Brahma-sútras*, in his commentaries on those original works. The text of the *Upadés'a-sahasri* has been expounded by more than one commentator; and among others by RÁMA TÍRT'HA, already noticed for his comment on the *Sancshépa-śáríraca*. His gloss of the *Upadés'a-sahasri* is entitled *Pada-yójanicá*.

Elementary treatises on the *Védanta* are very abundant. It may suffice to notice a few which are popular and in general use, and which have been consulted in the preparation of the present essay.

The Védánta-paribháshá of Dharma-rája dícshita explains, as its title indicates, the technical terms of the Védánta; and, in course of doing so, opens most of the principal points of its doctrine. A commentary on this work by the author's son, Ráma-crisháa dícshita, bears the title of Védánta-śic'hámani. Taken together, they form an useful introduction to the study of this branch of Indian philosophy.

The Védánta-sára is a popular compendium of the entire doctrine of the Védánta. It is the work of Sadánanda, disciple of Adwayánanda or Adwaitánanda before-mentioned, and has become the text for several

^{*} Mr. Ward has given, in the fourth volume of his View of the History, Literature, and Mythology of the Hindus (third edition), a translation of the Védánta-sára. I wish to speak as gently as I can of Mr. Ward's performance; but having collated this, I am bound to say it is no version of the original text, and seems to have been made from an oral exposition through the medium of a different language, probably the Bengalese. This will be evident to the oriental scholar on the slightest comparison: for example, the introduction, which does not correspond with the original in so much as a single word, the name of the author's preceptor alone excepted; nor is there a word of the translated introduction countenanced by any of the commentaries. At the commencement of the treatise, too, where the requisite qualifications of a student are enumerated, Mr. Ward makes his author say, that a person possessing those qualifications is heir to the véda (p. 176). There is no term in the text, nor in the commentaries, which could suggest the notion of heir; unless Mr. Ward has so translated adhicars (a competent or qualified person), which in Bengalese signifies proprietor, or, with the epithet uttara (uttaradhicdrs), heir or successor. It would be needless to pursue the comparison further. The meaning of the original is certainly not to be gathered from such translations of this and (as Mr. Ward terms them) of other principal works of the Hindus, which he has presented to the public.

I was not aware, when preparing the former essays on the Philosophy of the Hindus which have been inserted in the first volume of Transactions of the Royal Asiatic Society, that Mr. Ward had treated the same topics: but I think it now unnecessary to revert to the subject, for the purpose of offering any remarks on his explanation of other branches of Indian philosophy.

commentaries; and, among the rest, the Vidwan-mano-ranjini, by RAMA-rint'ha, who has been already twice noticed for other works; and the Subodhini, by Nrisinha saraswati, disciple of Crishnanda.

A few other treatises may be here briefly noticed.

The S'ástra-siddhánta-lésa-sangraha, by Apyaya or (Apyai) dícshita, son of Ranganát'ha or Rangarája dícshita, and author of the Parimala on the Siddhánta Calpataru, before-mentioned, as well as of other works, has the benefit of a commentary, entitled Crisháalancára, by Achyuta Crisháananda tírt'ha, disciple of Swayam-pracás'ánanda saraswatí. The Védánta-siddhánta-vindu, by Madhusúdana, disciple of Vis'wés'waránanda saraswatí, and author of the Védánta-calpa-laticá and of other works, is in like manner commented on by Brahmánanda, disciple of Náráyańa tírt'ha.

Analysis.*

The uttara mimins opens precisely as the púrva, announcing the purport in the same terms, except a single, but most important word, brahmé instead of dharma. 'Next, therefore, the inquiry is concerning God.' It proceeds thus: '[He is that] whence are the birth and [continuance, and dissolution] of this [world]: [He is] the source of [revelation or] holy ordinance.' That is, as the commentators infer from these aphorisms so expounded, 'He is the omnipotent creator of the world and the omniscient author of revelation.' It goes on to say, 'This appears from the import and right construction of holy writ.'

The author of the sútras next§ enters upon a confutation of the Sánc'hyas, who insist that nature, termed prad'hána, which is the material cause of the universe, as they affirm, is the same with the omniscient and omnipotent cause of the world recognised by the védas. It is not so; for 'wish' (consequently volition) is attributed to that cause, which moreover is termed (átman) soul: 'He wished to be many and prolific, and became manifold.' And again, 'He desired to be many, &c......'¶ Therefore he is a sentient rational being; not insensible, as the pracriti (nature) or pradhána (matter) of Capilla is affirmed to be.

^{*} In this analysis of the sutras, a portion of the scholia or explanations of commentators is blended with the text, for a brief abstract and intelligible summary of the doctrine.

⁺ Br. Sútr. 1. 1. § 1.

[†] Ib. § 2 and 3.

^{||} Ib. § 4.

[§] Ib. § 5. (sútr. 5. 11.)

[¶] Ch'hándbgya, 6.

In the sequel of the first chapter* questions are raised upon divers passages of the védas, alluded to in the text, and quoted in the scholia, where minor attributes are seemingly assigned to the world's cause; or in which subordinate designations occur, such as might be supposed to indicate an inferior being, but are shown to intend the supreme one.

The cases (adhicarañas) or questions arising on them are examined and resolved concisely and obscurely in the sútras, fully and perspicuously in the scholia.

"The omnipotent, omniscient, sentient cause of the universe, is (anandamaya) essentially happy.† He is the brilliant, golden person, seen within (antar) the solar orb and the human eye.‡ He is the etherial element (dcdśa), from which all things proceed and to which all return. He is the breath (prdńa) in which all beings merge, into which they all rise. He is the light (jyótish) which shines in heaven, and in all places high and low, every where throughout the world, and within the human person. He is the breath (prdńa) and intelligent self, immortal, undecaying, and happy, with which Indra, in a dialogue with Pratardana, identifies himself. ¶

The term prána, which is the subject of two of the sections just quoted (§ 9 and 11), properly and primarily signifies respiration, as well as certain other vital actions (inspiration, energy, expiration, digestion, or circulation of nourishment); and secondarily, the senses and organs.** But, in the passages here referred to, it is employed for a different signification, intending the supreme Brahme; as also in divers other texts of the védas: and, among the rest, in one where the senses are said to be absorbed into it during profound sleep;†† for 'while a man sleeps without dreaming, his soul is with Brahme.'

Further cases of the like nature, but in which the indications of the true meaning appear less evident, are discussed at length in the second and third chapters of the first book. Those in which the distinctive attributes of the supreme being are more positively indicated by the passage whereon a question arises, had been considered in the foregoing chapter: they are not so clearly denoted in the passages now examined. Such as concern God as the object of devout meditation and worship, are for the most part collected in the

^{* § 6} to § 11.

⁺ Taittiriya.

[‡] Ch'hándbgya, 1.

[§] Ch'hándógya, 1.

^{||} Udgit'ha.

[¶] Caushítaci.

^{**} Br. Sútr. 2. 4. § 1, 6. (§ 1, 13.)

^{††} Sanc. &c. on Br. Sútr. 1. 1. § 9.

second chapter: those which relate to GoD as the object of knowledge, are reserved for the third. Throughout these cases, completed where requisite by the scholiast, divers interpretations of a particular term or phrase are first proposed, as obvious and plausible, and reasons favourable to the proposed explanation set forth; but are set aside by stronger arguments, for a different and opposite construction. The reasoning is here omitted, as it would need much elucidation; and the purpose of this analysis is to exhibit the topics treated, and but summarily the manner of handling them.

It is not the embodied (sártra) and individual soul, but the supreme Brahme himself,* on whom devout meditation is to be fixed, as enjoined in a passage which declares: 'this universe is indeed Brahme;* for it springs from him, merges in him, breathes in him: therefore, serene, worship him. Verily, a devout man, as are his thoughts or deeds in this world, such does he become departing hence [in another birth]. Frame then the devout meditation, "a living body endued with mind....."

It is neither fire nor the individual soul, but the supreme being, who is the 'devourer' (attr*) described in the dialogue between Yama and Nachicktas: † 'who, then, knows where abides that being, whose food is the priest and the soldier (and all which is fixt or moveable), and death is his sauce?'

In the following passage, the supreme spirit, and not the intellectual faculty, is associated with the individual living soul, as "two occupying the cavity or ventricle of the heart" (guhám pravishtau átmanau). Theologists, as well as worshippers maintaining sacred fires, term light and shade the contrasted two, who abide in the most excellent abode, worthy of the supreme, occupying the cavity (of the heart), dwelling together in the worldly body, and tasting the certain fruit of good (or of evil) works.'§

In the following extract from a dialogue,¶ in which Satyacáma instructs Upacós'ala, the supreme being is meant; not the reflected image in the eye, nor the informing deity of that organ, nor the regent of the sun, nor

^{*} Brahman is, in this acceptation, a neuter noun (nom. Brahme or Brahma); and the same term in the masculine (nom. Brahma), is one of the three gods who constitute one person. But it is more conformable with our idiom to employ the masculine exclusively, and many Sanscrit terms of the same import are masculine; as Paramátman-(tmå), Paramés'wara, &c.

[†] Ch'hándógya, 3. S'ún'd'ilya vidyá. Br. Sútr. 1. 2. § 1. (S. 1, 8.)

[‡] Cat'havallí, 2. Br. Sútr. 1. 2. § 2. (S. 9, 10). § Cat'havallí, 3. Br. S. 1. 2. § 3. (S. 11, 12.)

[¶] Ch'hándógya, 4. Upacósala-vidyá. Br. Sútr. 1. 2. § 4. (S. 13, 17.)

the individual intelligent soul. 'This being, who is seen in the eye, is the self (dtman): He is immortal, fearless Brahme. Though liquid grease, or water, be dropped therein, it passes to the corners (leaving the eye-ball undefiled).

So, in a dialogue, in which Yájnyawalcya instructs Uddálaca,* "the internal check" (antaryámin) is the supreme being; and not the individual soul, nor the material cause of the world, nor a subordinate deity, the conscious informing regent of the earth, nor a saint possessing transcendent power: where premising, 'he who internally restrains (or governs) this and the other world, and all beings therein,' the instructor goes on to say: 'who standing in the earth is other than the earth, whom the earth knows not, whose body the earth is, who interiorly restrains (and governs) the earth: the same is thy soul (and mine), the "internal check" (antaryámin), immortal, &c.'

Again, in another dialogue, Angiras, in answer to Mahásála, who with SAUNACA visited him for instruction, declares 'there are two sciences, one termed inferior, the other superior. The inferior comprises the four védas, with their appendages, grammar, &c.' (all of which he enumerates): 'but the superior (or best and most beneficial) is that by which the unalterable (being) is comprehended, who is invisible (imperceptible by organs of sense), ungrasped (not prehensible by organs of action), come of no race, belonging to no tribe, devoid of eye, ear (or other sensitive organ), destitute of hand, foot (or other instrument of action), everlasting lord, present every where, yet most minute. Him, invariable, the wise contemplate as the source (or cause) of beings. As the spider puts forth and draws in his thread, as plants spring from the earth (and return to it), as hair of the head and body grows from the living man, so does the universe come of the unalterable...... Here it is the supreme being, not nature or a material cause, nor an embodied individual soul, who is the invisible (adrés'ya) ungrasped source of (all) beings (bhúta-yóni).

In a dialogue between several interlocutors, PRÁCHÍNASÁLA, UDDÁLACA, and As'wapati, king of the *Caicéyis*, (of which a version at length was inserted in an essay on the *védas*, As. Res. vol. viii. p. 446), the terms *vaiś wánara* and *átman* occur (there translated universal soul). The ordinary acceptation of

^{*} Vrihad áran'yaca, 5. Br. Sútr. 1. 2. § 5. (S. 18, 20.)

[†] Mun'd'aca, an upanishad of the At'harvana. Br. Sútr. 1. 2. § 6. (S. 21, 23.)

vaiswanara is fire: and it is therefore questioned, whether the element of fire be not here meant, or the regent of fire, that is, the conscious, informing deity of it, or a particular deity described as having an igneous body, or animal heat designated as alvine fire; and whether likewise átman intends the living, individual soul, or the supreme being. The answer is, that the junction of both general terms limits the sense, and restricts the purport of the passage to the single object to which both terms are applicable: it relates, then, to the supreme being.*

Under this section the author twice cites Jaimini: once for obviating any difficulty or apparent contradiction in this place, by taking the term in its literal and etymological sense (universal guide of men), instead of the particular acceptation of fire; and again, as justifying, by a parallel passage in another $v\acute{e}da$, an epithet intimating the minute size of the being in question ($pr\acute{a}d\acute{e}s'a-m\acute{a}tra$), a span long. On this last point other ancient authors are likewise cited: one, As'marat'hya, who explains it as the result of shrinking or condensation; the other, Bádari, as a fruit of imagination or mental conception. Reference is also made to another s'ác'há of the véda, where the infinite, supreme soul, is said to occupy the spot between the eye-brows and nose.

'That on which heaven and earth and the intermediate transpicuous region are fixt, mind, with the vital airs (or sensitive organs), know to be the one soul (dtman): reject other doctrines. This alone is the bridge of immortality, In this passage of an upanishad of the Atharvana, Brahme is intended, and not any other supposed site (dyatana) of heaven, earth, &c.

In a dialogue between NAREDA and SANATCUMÁRA, the (bhúman) "great" one, proposed as an object of inquiry for him who desires unlimited happiness, since there is no bliss in that which is finite and small, is briefly defined. 'He is great, in whom nought else is seen, heard, or known: but that wherein ought else is seen, heard, or known, is small.'†† Here the supreme being is meant; not breath (prán'a), which had been previously mentioned as greatest, in a climax of enumerated objects.

^{*} Ch'handógya, 5. Br. Sútr. 1. 2. § 7. (S. 24, 32.)

[†] Ib. S. 28 and 31.

‡ Vájasanéyi brahmana.

[§] By an oversight, the expression relative to diminutive dimension was omitted in the translated passage.

| Br. Sútr. 1. 2. 29. 30.

[¶] Jábála. ** Mun'd'aca. Br. Sútr. 1. 3. § 1. (S. 1, 7.)

^{††} Ch'hándógya, 7. Bhúmavidyá. Br. Sútr. 1. 3. § 2. (S. 8, 9.)

So, in a dialogue between YAJNYAWALCYA and his wife GARGÍ,* being asked by her, 'the heaven above, and the earth beneath, and the transpicuous region between, and all which has been, is, and will be, whereon are they woven and sewn?' answers, the ether (dcás'a); and being further asked, what it is on which ether is woven or sewn? replies, 'the unvaried being, whom Bráhmanas affirm to be neither coarse nor subtile, neither short nor long......' It is the supreme being who is here meant.

'The mystic syllable om, composed of three elements of articulation, is a subject of devout meditation; and the efficacy of that meditation depends on the limited or extended sense in which it is contemplated. The question concerning this mode of worship is discussed in a dialogue between Pippaláda and Satyacáma.†

If the devotion be restricted to the sense indicated by one element, the effect passes not beyond this world; if to that indicated by two of the elements, it extends to the lunar orb, whence however the soul returns to a new birth; if it be more comprehensive, embracing the import of the three elements of the word, the ascent is to the solar orb, whence, stripped of sin, and liberated as a snake which has cast its slough, the soul proceeds to the abode of *Brahme*, and to the contemplation of (purusha) him who resides in a corporeal frame: that is, soul reposing in body (puri-s'aya).

That mystic name, then, is applied either to the supreme Brahme, uniform, with no quality or distinction of parts; or to Brahme, not supreme, but an effect (cárya) diversified, qualified; who is the same with the Viráj and Hiran'ya-garbha of mythology, born in the mundane egg.

It appears from the latter part of the text, that it is the supreme BRAHME to whom meditation is to be directed, and on whom the thoughts are to be fixed, for that great result of liberation from sin and worldly trammels.

In a passage descriptive of the lesser ventricle of the heart, it is said: 'within this body (Brahme-pura) Brahme's abode, is a (dahara) little lotus, a dwelling within which is a (dahara) small vacuity occupied by ether (ácás'a). What that is which is within (the heart's ventricle) is to be inquired, and should be known.' A question is here raised, whether that 'ether'

^{*} Vrih. Aran'y, 5. Br. Sutr. 1. 3. § 3. (S. 10, 12.)

⁺ Prasina, an upanishad of the At'harvana. Br. Sútr. 1.3. § 4. (S. 13.)

[‡] Ch'hándógya, 8. Dahara-vidyá. Br. Sútr. 1. 3. § 5. (S. 14, 21.)

(dcds'a) within the ventricle of the heart be the etherial element, or the individual sensitive soul, or the supreme one; and it is pronounced from the context, that the supreme being is here meant.

'The sun shines not therein, nor the moon, nor stars: much less this fire. All shines after his effulgence (reflecting his light), by whose splendour this whole (world) is illumined.'* In this passage it is no particular luminary or mine of light, but the (prajnya) intelligent soul (supreme Brahme) which shines with no borrowed light.

In the dialogue between YAMA and NACHICÉTAS, before cited, are the following passages.† 'A person (purusha) no bigger than the thumb abides in the midst of self;' and again, 'the person no bigger than the thumb is clear as a smokeless flame, lord of the past (present) and future; he is today and will be to-morrow: such is he (concerning whom you inquire).' This is evidently said of the supreme ruler, not of the individual living soul.

Another passage of the same *upanishad* ‡ declares: 'this whole universe, issuing from breath (*prána*), moves as it impels: great, terrible, as a clap of thunder. They, who know it, become immortal.' *Brahme*, not the thunderbolt nor wind, is here meant.

'The living soul (samprasada) rising from this corporeal frame, attains the supreme light, and comes forth with his identical form.' It is neither the light of the sun, nor the visual organ, but Brahme, that is here meant.

'Ether (dcás'a) is the bearer (cause of bearing) of name and form. That, in the midst of which they both are, is Brahme: it is immortality; it is soul.' A'cás'a here intends the supreme being, not the element so named.

In a dialogue between YAJNYAWALCYA and JANACA, ¶ in answer to an inquiry 'which is the soul?' the intelligent internal light within the heart is deckared to be so. This likewise is shown to relate to the supreme one, unaffected by worldly course.

It had been intimated in an early aphorism of the first chapter, that the védas, being rightly interpreted, do concur in the same import, as there

^{*} Mun'd'aca, Br. Sútr. 1. 3. § 6. (S. 22, 23.) + Cát'ha. 4. Br. Sútr. 1. 3. § 7. (S. 24, 25.)

[‡] Cát'ha, 6. Br. Sútr. 1. 3. § 10. (S. 39).

[§] Ch'hándógya 8. Prajápati vidyá. Br. Sútr. 1. 3. § 11. (S. 40.)

[|] Ib. ad finem, Br. Sutr. 1. 3. § 12. (S. 41.)

[¶] Vrihad Aran'yaca, 6. Br. Sutr. 1. 3. § 13. (S. 42, 43.)

expressed, concerning the omnipotent and omniscient creator of the uni-An objection to this conclusion is raised, upon the ground of discrepancy remarked in various texts of the védas,† which coincide, indeed, in ascribing the creation to Brahme, but differ in the order and particulars of the world's development. The apparent contradiction is reconciled, as they agree on the essential points of the creator's attributes; omnipotent and omniscient providence, lord of all, soul of all, and without a second, &c.: and it was not the object of the discrepant passages to declare the precise succession and exact course of the world's formation.

Two more sections are devoted to expound passages which define Brahme as creator, and which are shown to comport no other construction. In one,‡ cited from a dialogue between AJÁTAS'ATRU and BÁLÁCI, surnamed GÁRGYA, the object of meditation and worship is pronounced to be, 'he who was the maker of those persons just before mentioned (regents of the sun, moon, &c.), and whose work this universe is.'

In the other, cited from a dialogue between YAJNYAWALCYA and MAI-TRÉYÍ, § soul, and all else which is desirable, are contrasted as mutual objects of affection: 'it is for soul (átman) that opulence, kindred, and all else which is dear, are so; and thereunto soul reciprocally is so; and such is the object which should be meditated, inquired, and known, and by knowledge of whom all becomes known.' This, it is shown, is said of the supreme, not of the individual soul, nor of the breath of life.

Under this last head several authorities are quoted by the author, for different modes of interpretation and reasoning, viz. Asmarat'hya, Audu-LÓMI-and CASACRISTNA, as JAIMINI under the next preceding (§ 5).

The succeeding section | affirms the important tenet of the Védánta, that the supreme being is the material, as well as the efficient, cause of the universe: it is a proposition directly resulting from the tenour of passages of the védas, and illustrations and examples adduced.

The first lecture is terminated by an aphorism,¶ intimating that, in the like manner as the opinion of a plastic nature and material cause (termed by the Sánc'hyas, pradhána) has been shown to be unsupported by the

^{*} Br. S. 1. 1. § 4. + Ch'hándógya, Taittiriya, and Aitareya.

[‡] Caushitaci Brahmana. Br. S. 1. 4. § 5. (S. 16-18.)

[§] Vrihad Aranyaca, Maitréyi bráhmana. Br. Sútr. 1. 4. § 6. (S. 19-22.)

^{||} Br. Sútr. 1. 4. § 7. (S. 23-27.) ¶ Ibid. § 8 (S. 28.) Vol. II.

text of the Véda, and inconsistent with its undoubted doctrine, so, by the like reasoning, the notion of atoms (an'u or paramán'u) and that of an universal void (s'unya), and other as unfounded systems, are set aside in favour of the only consistent position just now affirmed. (Br. Sútr. 1.1. § 5 and 1.4. §7.)

Not to interrupt the connexion of the subjects, I have purposely passed by a digression, or rather several, comprised in two sections of this chapter,* wherein it is inquired whether any besides a regenerate man (or Hindu of the three first tribes) is qualified for theological studies and theognostic attainments; and the solution of the doubt is, that a s'udra, or man of an inferior tribe, is incompetent;† and that beings superior to man (the gods of mythology) are qualified.

In the course of this disquisition the noted question of the eternity of sound, of articulate sound in particular, is mooted and examined. It is a favourite topic in both miminsás, being intimately connected with that of the cternity of the véda, or revelation acknowledged by them.

I shall not, however, enter into the matter further, in this place, though much remain to be added to the little which was said on it in a former essay.

In the fourth chapter of the first lecture, the author returns to the task of confuting the Sánc'hya doctrine; and some passages of the védas, apparently favouring that doctrine, are differently interpreted by him: 'the indistinct one (avyacta) is superior to the great one (mahat), and embodied soul (purusha) is superior to the indistinct.' Here the very same terms, which the Sánc'hyas employ for 'intelligence, nature and soul,' are contrasted, with allusion seemingly to the technical acceptations of them. This passage is, however, explained away; and the terms are taken by the Védántins in a different sense.

The next instance is less striking and may be briefly dismissed, as may that following it: one relative to ajá, alleged to signify in the passage in question the unborn sempiternal nature (pracriti), but explained to intend a luminous nature (pracriti) noticed in the Ch'hándógya; (there is in the text itself an evident allusion to the ordinary acceptation of the word, a

^{*} Br. Sútr. 1. 3. § 8, 9. (S. 26-38.) † Br. Sútr. 1. 3. (S. 28-29.)

[†] Vol. 1. p. 446. § Cá'tha 3. Br. Sútr. 1. 4. § 1. (S. 1-7.)

^{||} Swétás'watara. B.S. 1. 4. § 2. (S. 8-10.)

she-goat): the other concerning the meaning of the words pancha-panchaja-náh, in a passage of the Vrihad Aranyaca,* which a follower of the Sanc'hya would construe as bearing reference to five times five (twenty-five) principles; but which clearly relates to five objects specified in the context, and figuratively termed persons (pancha-jana).

It is because the Sánc'hya doctrine is, in the apprehension of the Védántins themselves, to a certain degree plausible, and seemingly countenanced by the text of the Védas, that its refutation occupies so much of the attention of the author and his scholiasts. More than one among the sages of the law (Dévala in particular is named) have sanctioned the principles of the Sánc'hya; and they are not uncountenanced by Menu.† Capila himself is spoken of with the reverence due to a saint (Mahá-Rishi) and inspired sage; and his most eminent disciples, as Panchas'ic'ha, &c. are mentioned with like veneration; and their works are dignified with the appellations of tantra and smriti as holy writings, by the Védántins, at the same time that these oppose and refute the doctrine taught by him.

Capila, indeed, is named in the Véda itself as possessing transcendent knowledge: but here it is remarked, that the name has been borne by more than one sage; and in particular by Vásudéva, who slew the sons of Sagara.[‡] This mythological personage, it is contended, is the Capila named in the Véda.

The second lecture continues the refutation of Capila's Sánc'hya, which, it is observed, is at variance with the smritis, as with the Védas: and here the name of Menu is placed at the head of them, although the institutes, which bear his name, will be found, as just now hinted, and as subsequently admitted in another section, to afford seeming countenance to Sánc'hya doctrines. Such passages are, however, explained away by the Védantins, who rely in this instance, as they do in that of the Véda itself, on other texts, which are not reconcileable to the Sánc'hya.

The same argument is, in the following section, sapplied to the setting aside of the Yôga-smrǐti of Patanjali (Hairan'ya-garbha), so far as that is inconsistent with the orthodox tenets deduced from the Védas; and, by parity of reasoning, to Cańade's atomical scheme; and to other systems which admit two distinct causes (a material and an efficient one) of the universe.

^{*} Vrihad Aran. 6. Br. S. 1. 4. § 3. (S. 11-13.)

⁺ Menu's Institutes, 12.50.

[‡] Sanc. on Br. Sútr. 2. 1. § 1. (S. 1-2.)

[§] Br. Sútr. 2. 1. § 2 (S. 3.)

The doctrine derived from the tenour of the Védas is to be supported, likewise, by reasoning independently of authority. 'The objection, that the cause and effect are dissimilar, is not a valid one: instances of such dissimilarity are frequent. Hair and nails, which are insensible, grow from a sensible animal body; and sentient vermin (scorpions, &c.) spring from inanimate sources (cow-dung, &c.) The argument, too, might be retorted; for, according to the adverse position, sentient beings are produced from an insensible plastic nature.* On these and other arguments the orthodox doctrine is maintainable by reasoning: and by like arguments opinions concerning atoms and an universal void, which are not received by the best persons, may be confuted.'†

'The distinction relative to fruition, discriminating one who enjoys and that which is enjoyed, does not invalidate the singleness and identity of Braime as cause and effect.‡ The sea is one and not other than its waters; yet waves, foam, spray, drops, froth, and other modifications of it, differ from each other.'

'An effect is not other than its cause. Brahme is single without a second. He is not separate from the embodied self. He is soul; and the soul is he. Yet he does not do that only which is agreeable and beneficial to self. The same earth exhibits diamonds, rock crystals, red orpiment &c.; the same soil produces a diversity of plants; the same food is converted into various excrescences, hair, nails, &c.

'As milk changes to curd, and water to ice, so is Brahme variously transformed and diversified, without aid of tools or exterior means of any sort. In like manner, the spider spins his web out of his own substance; spirits assume various shapes; cranes (valded) propagate without the male; and the lotus proceeds from pond to pond without organs of motion. That Brahme is intire without parts, is no objection: he is not wholly transformed into worldly appearances. Various changes are presented to the same dreaming soul. Divers illusory shapes and disguises are assumed by the same spirit.

Brahme is omnipotent, able for every act, without organ or instrument.** No motive or special purpose need be assigned for his creation of the universe, besides his will.††

^{*} Br Sútr. 2. 1. § 3. (S. 4. 11.) + Ibid. § 4. (S. 12.) ‡ Ibid. § 5. (S. 13.)

[§] Ibid. § 6. (S. 14-20) and § 7. (S. 21-23.) || Ibid. § 8. (S. 24-25.)

[¶] Ibid. § 9. (S. 26-29.) ** Ibid. § 10. (S. 30-31.) ++ Ibid. § 11. (S. 32-33.)

'Unfairness and uncompassionateness are not to be imputed to him, because some (the gods) are happy, others (beasts and inferior beings) are miserable, and others again (men) partake of happiness and unhappiness. Every one has his lot, in the renovated world, according to his merits, his previous virtue or vice in a former stage of an universe, which is sempiternal and had no beginning in time. So the rain-cloud distributes rain impartially; yet the sprout varies according to the seed.'*

'Every attribute of a first cause (omniscience, omnipotence, &c.) exists in Brahme, who is devoid of qualities.'†

The second chapter of the second lecture is controversial. The doctrine of the Sánc'hyas is confuted in the first section; that of the Vais'éshicas in two more; of the Bauddhas in as many; of the Jainas in one; of the Pás'upatas and Páncharátras, likewise, in one each. These controversial disquisitions are here omitted; as à brief abstract would hardly be intelligible, and a full explanation would lead to too great length. They have been partly noticed in a separate treatise on the Philosophy of Indian Sects (vol. 1. p. 549). It is remarkable, that the Nyáya of Gótama is entirely unnoticed in the text and commentaries of the Védánta-sútras.

In the third chapter of the second lecture, the task of reconciling seeming contradictions of passages in the védas is resumed.

'The origin of air and the etherial element (ácás'a), unnoticed in the text of the véda (Ch'hándógya), where the creation of the three other elements is described, has been affirmed in another (Taittiríyaca).‡ The omission of the one is supplied by the notice in the other; there is no contradiction, as the deficient passage is not restrictive, nor professes a complete enumeration. Ether and air are by Brahme created. But he himself has no origin, no procreator nor maker, for he is eternal, without beginning as without end.§ So fire, and water, and earth, proceed mediately from him, being evolved successively, the one from the other, as fire from air, and this from ether. If The element of earth is meant in divers passages where food (that is, esculent vegetable) is said to proceed from water: for rain fertilizes the earth. It is by his will, not by their own act, that they are so evolved; and conversely, they merge one into the other, in the reversed order, and are re-

^{*} Br. Sútr. 2. 1. § 12. (S. 34-36.)

[‡] Ibid. 2. 3. § 1 and 2. (S. 1-7 and 8.)

^{||} Ibid. § 4-6. (S. 10-12.)

[†] Ibid. § 13. (S. 37.)

[§] Ibid. § 3. (S. 9.)

absorbed at the general dissolution of worlds, previous to renovation of all things.'*

'Intellect, mind, and organs of sense and action, being composed of the primary elements, are evolved and re-absorbed in no different order or succession, but in that of the elements of which they consist.'t

The same course, evolution and re-absorption, or material birth and death, cannot be affirmed of the soul. Birth and death are predicated of an individual, referring merely to his association with body, which is matter fixed or moveable. Individual souls are, in the véda, compared to sparks issuing from a blazing fire; but the soul is likewise declared expressly to be eternal and unborn. Its emanation is no birth, nor original production.‡ It is perpetually intelligent and constantly sensible, as the Sánc'hyas too maintain; not adventitously so, merely by association with mind and intellect, as the disciples of Cańáde insist. It is for want of sensible objects, not for want of sensibility or faculty of perception, that the soul feels not during profound sleep, fainting, or trance.

'The soul is not of finite dimensions, as its transmigrations seemingly indicate; nor minutely small abiding within the heart, and no bigger than the hundredth part of a hundredth of a hair's point, as in some passages described; but, on the contrary, being identified with supreme Brahme, it participates in his infinity.'S

'The soul is active; not, as the Sánc'hyas maintain, merely passive. Its activity, however, is not essential, but adventitious. As the carpenter, having his tools in hand, toils and suffers, and laying them aside, rests and is easy, so the soul in conjunction with its instruments (the senses and organs) is active, and quitting them, reposes.

'Blind in the darkness of ignorance, the soul is guided in its actions and fruition, in its attainment of knowledge and consequent liberation and bliss, by the supreme ruler of the universe,** who causes it to act conformably with its previous resolves: now, according to its former purposes, as then consonantly to its yet earlier predispositions, accruing from preceding forms with no retrospective limit; for the world had no beginning. The supreme soul makes the individuals act relatively to their virtuous or vicious

^{*} Br. Sútr. 2. 3. § 7-8. (S. 13-14.) † Ibid. § 9. (S. 15.) ‡ Ibid. § 10-11. (S. 16-17.) § Ibid. § 13. (S. 19-32.) || Ibid. § 14. (S. 33-39.) ¶ Ibid. § 15. (S. 40.) *• Ibid. § 16. (S. 41-42.)

propensities, as the same fertilizing rain-cloud causes various seeds to sprout multifariously, producing diversity of plants according to their kind.

'The soul is a portion of the supreme ruler," as a spark is of fire. The relation is not as that of master and servant, ruler and ruled, but as that of whole and part. In more than one hymn and prayer of the védast it is said, "all beings constitute one quarter of him; three quarters are imperishable in heaven:"and in the I'śwara-gúᇠand other smritis, the soul, that animates body, is expressly affirmed to be a portion of him. He does not, however, partake of the pain and suffering of which the individual soul is conscious, through sympathy, during its association with body; so solar or lunar light appears as that which it illumines, though distinct therefrom.

'As the sun's image reflected in water is tremulous, quaking with the undulations of the pool, without however affecting other watery images nor the solar orb itself; so the sufferings of one individual affect not another, nor the supreme ruler. But, according to the doctrine of the Sánc'hyas, who maintain that souls are numerous, each of them infinite, and all affected by one plastic principle, nature (pradhána or pracriti), the pain or pleasure, which is experienced by one, must be felt by all. The like consequence is objected to the doctrine of Cańade, who taught that souls, numerous and infinite, are of themselves insensible; and mind, the soul's instrument, is minute as an atom, and by itself likewise unsentient. The union of one soul with a mind would not exclude its association with other souls, equally infinite and ubiquitary; and all, therefore, would partake of the same feeling of pain or pleasure.'

The fourth chapter of the second book proceeds in the task of reconciling apparent contradictions of passages in the védas.§

'The corporeal organs of sense and of action, designated by the term prán'a in a secondary acceptation (it is noticed in its proper signification further on, § 4), have, like the elements and other objects treated of in the foregoing chapter, a similar origin, as modifications of Brahme; although unnoticed in some passages concerning the creation, and mentioned in others as pre-existent, but expressly affirmed in others to be successively evolved. The deficiency or omission of one text does not invalidate the explicit tenour of another.

^{*} Br. Sútr. § 17. (S. 43-53.) + Rǐgvéda, 8. 4. 17. Yajurvéda (Vájasanéyî) 31. 3.

[‡] S'ancara cites by this name the Bhagavad Gitá. § Br. Sútr. 2. 4. § 1. (S. 1-4.)

'In various passages, the number of corporeal organs is differently stated, from seven to thirteen. The precise number is, however, eleven:* the five senses, sight, &c.; five active organs, the hand, &c.; and lastly, the internal faculty, mind, comprehending intelligence, consciousness, and sensation. Where a greater number is specified, the term is employed in its most comprehensive sense; where fewer are mentioned, it is used in a more restricted acceptation: thus seven sensitive organs are spoken of, relatively to the eyes, ears, and nostrils (in pairs), and the tongue.'

'They are finite and small: not, however, minute as atoms, nor yet gross, as the coarser elements.†

'In its primary or principal signification, prdn'a is vital action, and chiefly respiration. This, too, is a modification of Brahme. It is not wind (vdyu) or the air which is breathed, though so described in numerous passages of the v'edas and other authorities; nor is it an operation of a corporeal organ; but it is a particular vital act, and comprehends five such: 1st respiration, or an act operating upwards; 2d inspiration, one operating downwards; 3d a vigorous action, which is a mean between the foregoing two; 4th expiration, or passage upwards, as in metempsychosis; 5th digestion, or circulation of nutriment throughout the corporeal frame.'

'Here, too, it must be understood of a limited, not vast or infinite act, nor minutely small. The vital act is not so minute as not to pervade the entire frame, as in the instance of circulation of nourishment; yet is small enough to be imperceptible to a bystander, in the instance of life's passage in transmigration.

'Respiration and the rest of the vital acts do not take effect of themselves by an intrinsic faculty, but as influenced and directed by a presiding deity and ruling power, yet relatively to a particular body, to whose animating spirit, and not to the presiding deity, fruition accrues.§

'The senses and organs, cleven in number as above mentioned, are not modifications of the principal vital act, respiration, but distinct principles.

'It is the supreme ruler, not the individual soul, who is described in passages of the *védas* as transforming himself into divers combinations, assuming various names and shapes, deemed terrene, aqueous, or igneous,

^{*} Br. Sútr. 2. 4. § 2. (S. 5-6.) † Ibid. § 3. (S. 7.) ‡ Ibid. § 4. (S. 8.) § 5. (S. 9-12.) § 6. (S. 13.) § Ibid. § 7. (S. 14-16.) || Ibid. § 8. (S. 17-19.)

according to the predominancy of the one or the other element. When nourishment is received into the corporeal frame, it undergoes a threefold distribution, according to its fineness or coarseness: corn and other terrene food becomes flesh; but the coarser portion is ejected, and the finer nourishes the mental organ. Water is converted into blood; the coarser particles are rejected as urine; the finer supports the breath. Oil or other combustible substance, deemed igneous, becomes marrow; the coarser part is deposited as bone, and the finer supplies the faculty of speech.**

The third lecture treats on the means whereby knowledge is attainable, through which liberation and perpetual bliss may be achieved: and, as preliminary thereto, on the passage of the soul furnished with organs into the versatile world and its various conditions; and on the nature and attributes of the supreme being.

'The soul is subject to transmigration. It passes from one state to another, invested with a subtile frame consisting of elementary particles, the seed or rudiment of a grosser body. Departing from that which it occupied, it ascends to the moon; where, clothed with an aqueous form, it experiences the recompense of its works; and whence it returns to occupy a new body with resulting influence of its former deeds. But evil-doers suffer for their misdeeds in the seven appointed regions of retribution.†

'The returning soul quits its watery frame in the lunar orb, and passes successively and rapidly through ether, air, vapour, mist, and cloud, into rain; and thus finds its way into a vegetating plant, and thence, through the medium of nourishment, into an animal embryo.'

In the second chapter of this lecture the states or conditions of the embodied soul are treated of. They are chiefly three; waking, dreaming, and profound sleep: to which may be added for a fourth, that of death; and for a fifth, that of trance, swoon, or stupor, which is intermediate between profound sleep and death (as it were half-dead), as dreaming is between waking and profound sleep. In that middle state of dreaming there is a fanciful course of events, an illusory creation, which however testifies the existence of a conscious soul. In profound sleep the soul has retired to the supreme one by the route of the arteries of the pericardium.

The remainder of this chapter is devoted to the consideration of the

[•] Br. Sútr. 2. 4. § 9. (S. 20-22.) † Ibid. 3. 1. § 1-3. (S. 1-7 and 8-11 and 12-21.)

[†] Ibid. 3. 1. § 4-6. (S. 22-23 and 24-27.) § Ibid. 3. 2. § 1-4. (S. 1-6, 7, 8, 9 and 10.) Vol. II.

nature and attributes of the supreme being. 'He is described in many passages of the véda, as diversified and endued with every quality and particular character; but in other and very numerous texts, as without form or quality. The latter only is truly applicable, not the former, nor yet both. He is impassible, unaffected by worldly modifications; as the clear crystal, seemingly coloured by the red blossom of a hibiscus, is not the less really pellucid. He does not vary with every disguising form or designation, for all diversity is expressly denied by explicit texts; and the notion of variableness relative to him is distinctly condemned in some s'dc'hás of the véda.*

- 'He is neither coarse nor subtile, neither long nor short, neither audible nor tangible; amorphous, invariable.'
- 'This luminous immortal being, who is in this earth, is the same with the luminous, immortal, embodied spirit, which informs the corporeal self, and is the same with the [supreme] soul.' 'He is to be apprehended by mind alone, there is not here any multiplicity. Whosoever views him as manifold dies death after death.'†
- 'He is amorphous, for so he is explicitly declared to be; but seemingly assuming form, as sunshine or moonlight, impinging on an object, appears straight or crooked.'
- 'He is pronouced to be sheer sense, mere intellect and thought: as a lump of salt is wholly of an uniform taste within and without, so is the soul an entire mass of intelligence.' This is affirmed both in the védas and in the smrǐtis: and, as such, he is compared to the reflected images of sun and moon, which fluctuate with the rise and fall of the waters that reflect them. § 'The luminous sun, though single, yet reflected in water, becomes various; and so does the unborn divine soul by disguise in divers modes.'

The *védu* so describes him, as entering into and pervading the corporeal shapes by himself wrought. He framed bodies, biped and quadruped; and becoming a bird, he passed into those bodies, filling them as their informing spirit.

In the Vrihad aran'yaca, after premising two modes of Brahme, morphous and amorphous; one composed of the three coarser elements, earth, water,

^{*} Br. Sútr. 3. 2. § 5. (S. 11-13.)

⁺ Passages of the véda cited among others by the scholiasts commenting on the above.

[‡] Br. Sútr. 3. 2. (S. 14.)

[§] Ibid. S. 15-20.

[|] Ibid. S. 21.

and fire; the other consisting of the two more subtile, air and ether; it is said, 'next then his name is propounded,' "neither so nor so; for there is none other but he, and he is the supreme." Here the finite forms premised are denied; for his existence as the supreme being is repeatedly affirmed in this and in other passages.*

'He is imperceptible; yet during devout meditation is, as it were, apprehended by perception and inference, through revelation and authentic recollections.†

'Like the sun and other luminaries, seemingly multiplied by reflection though really single, and like ether (space) apparently subdivided in vessels containing it within limits, the (supreme) light is without difference or distinction of particulars, for he is repeatedly declared so to be.‡ Therefore is one, who knows the truth, identified with the infinite being; for so revelation indicates. But since both are affirmed, the relation is as that of the coiled serpent fancied to be a hoop; or as that of light and the luminary from which it proceeds, for both are luminous.§

'There is none other but he, notwithstanding the apparent import of divers texts, which seem to imply differences, various relations, and aliquot parts. He is ubiquitary and eternal; for he is pronounced to be greater than etherial space, which is infinite.

'The fruit or recompense of works is from him, for that is congruous; and so it is expressly affirmed in the védas. Jaimini alleges virtue or moral merit; but the author of the sútras (Badaráyana vyása) maintains the former, because the supreme being is in the védas termed the cause of virtue and of vice, as of every thing else.'¶

The two last chapters of the third lecture relate chiefly to devout exercises and pious meditation, the practice of which is inculcated as proper and requisite to prepare the soul and mind for the reception of divine knowledge, and to promote its attainment. I pass rapidly over this copious part** of the text, for the same reason for which I restricted myself to a very brief notice of the Yóga or theistical Sánc'hya of Patanjali; because religious observances are more concerned than philosophy with the

^{*} Br. Sútr. 3. 2. § 6. (S. 22.)

[†] Ibid. S. 23-24.

[‡] Ibid. S. 25.

[§] Ibid. S. 26-30.

[|] Ibid. § 7.

[¶] Ibid. § 8.

^{**} The third chapter contains thirty-six sections, comprising sixty-six aphorisms; the fourth includes eighteen, comprehending fifty-two sútras; and the subject is pursued in the eight first sections of the fourth lecture.

topics there treated, and the ritual of the Yoga according to both systems, Sánc'hya and Védánta, would be a fitter subject of a separate treatise, rather than to be incidentally touched on while investigating the philosophical doctrines of both schools.

Various questions arise on the modes, forms, and object of meditation taught in the *Upanishads* and in other portions of the *Védas*, as well as on exterior observances either immediately or mediately connected therewith, and likewise on the direct efficacy of knowledge, which are all considered and solved at much length. In general, but not always, the same divine knowledge, the same worship, and like meditations, are intended by the same designations in different *védas*, the omissions and obscurities of one being supplied and explained by another, and even under various designations. By the acquisition of such knowledge, attainable as it is in the present or in a future birth, in lifetime, or to take effect after death, the influence of works is annulled, and consequent deliverance is single, not varying in degree and inducing different gradations of bliss, but complete and final happiness.

The fourth lecture relates chiefly to the fruit and effect of pious meditation properly conducted, and the consequent attainment of divine knowledge. The beginning of the first chapter is, however, supplemental to the foregoing lecture, treating of devout exercises, and the posture (a sitting one) in which devotion and contemplation should be practised, with constant repetition of those observances, and persisting therein during life.*

So soon as that knowledge is attained, past sin is annulled and future offence precluded.† "As water wets not the leaf of the lotus, so sin touches not him who knows God: as the floss on the carding comb cast into the fire is consumed, so are his sins burnt away."‡

'In like manner, the effect of the converse (that is, of merit and virtue) is by acquisition of knowledge annulled and precluded. It is at death that these consequences take place.\(\) "He traverses both (merit and demerit) thereby.\(\)"\" "The heart's knot is broken, all doubts are split, and his works perish, when he has seen the supreme being.\(\)"\" "All sins

^{*} Br. Sútr. 4. 1. § 1-8 (S. 1-12.) † Ibid. § 9. (S. 13.) ‡ Ch'hándógya, Brahme vidyá. § Br. S. 4. 1. § 10. (S. 14.) || Vrihad Aran'yaca. ¶ Mun'd'aca.

depart from him:" meaning good works as well as misdeeds; for the confinement of fetters is the same, whether the chain be of gold or iron.'t

- 'But only such antecedent sin and virtue are annulled, as had not begun to have effect: for their influence lasts until his deliverance, and then does he merge in the supreme Brahme. Those which were in operation are not annulled, as the arrow, which has been shot, completes its flight, nor falls till its speed is spent; and the potter's wheel, once set in motion, whirls till the velocity which has been communicated to it is exhausted.
- 'However, the maintenance of a perpetual fire, and certain other religious observances enjoined as conducive to the same end, are not rendered inefficacious; § for it is declared that "Bráhmanas seek divine knowledge by holy study, sacrifice, liberality, and devotion:" and according to some s'ác'has of the véda, other merits remain likewise effectual; for sons succeed to the inheritance of their father's works; the affectionate share his good deeds; and the malignant participate of his ill actions." These sacrificial observances may be such as are conjoined with devout exercises, faith, and pious meditation; or unattended by those holy practices for attainment of divine knowledge, since they are pronounced most efficacious when so conjoined, which implies that they are not wholly inoperative by themselves.'**

'Having annulled by fruition other works which had begun to have effect, having enjoyed the recompense and suffered the pains of good and bad actions, the possessor of divine knowledge, on demise of the body, proceeds to a reunion with Brahme.††

The fruit of divine knowledge having been shown in the first chapter, the second chapter of this lecture treats of the particular effect of devout exercises joined with appropriate meditation. It chiefly concerns the ascent of the soul, or mode in which it passes from the body.

'Of a dying person the speech, followed by the rest of the ten exterior faculties (not the corporcal organs themselves), is absorbed into the mind, for the action of the outer organ ceases before the mind's. This, in like

^{*} Ch'hándógya. † Anon. com. † Br. Sútr. 4. 1. § 11. (S. 15.) Ch'hándógya. § Ibid. § 12. (S. 16-17.) | Vrihad Aran'yaca.

[¶] Satyúyana. ** Br. Sútr. 4. 1. § 13. (S. 18.) Ch'hándógya.

^{††} Ibid. § 14. (S. 19.) Ch'hándógya and Vrihad Aran'yaca.

manner, retires into the breath, attended likewise by all the other vital functions, for they are life's companions; and the same retreat of the mind is observable, also, in profound sleep and in a swoon. Breath, attended likewise by all other vital faculties, is withdrawn into the living soul which governs the corporeal organs, as the attendants of a king assemble around him when he is setting out upon a journey; for all vital functions gather about the soul at the last moment when it is expiring. The living soul, attended with all its faculties, retires within a rudiment of body, composed of light with the rest of the five elements, in a subtile state. "Breath" is, therefore, said to withdraw into "light;" not meaning that element (or fire) exclusively; nor intending direct transition, for a traveller has gone from one city to another, though he passed through an intermediate town."

- · This retirement from the body is common to ordinary uninformed people as to the devout contemplative worshipper, until they proceed further on their respective paths; and immortality (without immediate reunion with the supreme Brahme) is the fruit of pious meditation, though impediments may not be wholly consumed and removed.‡
- In that condition the soul of the contemplative worshipper remains united to a subtile elementary frame, conjoined with the vital faculties, until the dissolution of worlds, when it merges in the supreme deity. That elementary frame is minute in its dimensions as subtile in its texture, and is accordingly imperceptible to bystanders when departing from the body: nor is it oppressed by cremation or other treatment which that body undergoes. It is by its warmth sensible so long as it abides with that coarser frame, which becomes cold in death when it has departed, and was warm during life while it remained.
- 'But he who has attained the true knowledge of God does not pass through the same stages of retreat, proceeding directly to reunion with the supreme being, with which he is identified, as a river, at its confluence with the sea, merges therein altogether. His vital faculties and the elements of which his body consists, all the sixteen component parts which constitute the human frame, are absorbed absolutely and completely: both name and form cease; and he becomes immortal, without parts or members.'

^{*} Ch'hándógya. Br. Sútr. 4. 2. § 1-3.

[†] Vrihad Aran'yaca.

[‡] Br. Sútr. 4. 2. § 4. (S. 7.)

[§] Ibid. § 5. (S. 8-11.) Cathavalli, &c.

[|] Ibid. § 6-8. (S. 12-16.) Cán'wa, Mádhyandina, Prasn'a, &c.

In course of expounding the text, some of the commentators compare the ultimate absorption of the vital faculties to the disappearance of water sprinkled on a hot stone.* They seem to be unaware of its evaporation, and consider it to have sunk into the stone.

'The soul, together with the vital faculties absorbed in it, having retired within its proper abode, the heart, the summit of that viscus flashes, and lightens the passage by which the soul is to depart: the crown of the head in the case of the wise; and any other part of the body, in the instance of the ignorant. A hundred and one arteries issue from the heart, one of which passes to the crown of the head: it is named sushumna. that passage, in virtue of acquired knowledge, and of recollection of the meditated way, the soul of the wise, graced by the favour of Brahme, whose dwelling is in the heart, issues and meets a solar ray; and by that route proceeds, whether it be night or day, winter or summer.† contact of a sunbeam with the vein is constant, as long as the body endures: rays of light reach from the sun to the vein, and conversely extend from this to the sun. The preferableness of summer, as exemplified in the case of Bhishma, who awaited the return of that auspicious season to die, does not concern the devout worshipper, who has practised religious exercises in contemplation of Brahme, as inculcated by the védas, and has consequently acquired knowledge. But it does concern those who have followed the observances taught by the Sánc'hya Yóga; according to which, the time of day and season of the year are not indifferent.

The further progress of the soul, from the termination of the coronal artery communicating with a solar ray to its final destination, the abode of Brahme, is variously described in divers texts of the véda; some specifying intermediate stations which are omitted by others, or mentioned in a different order.[‡] The seeming discrepancies of those passages are reconciled, and all are shown to relate to one uniform route, deduced from the text, for the divine journey (déva-yána) which the liberated soul travels. A question arises, whether the intermediate stations, which are mentioned, be stages of the journey, or scenes of fruition to be visited in succession, or

^{*} Ranganátha on Br. Sútr. 4. 2. 6. (S. 12.)

[†] Br. Sútr. 4 2. § 9-11. (S. 17-21.) Vri. Aran'. Ch'hándógya, &c.

[†] Ch'hándógya, Caushítaci, Vrihad Aran'yaca, &c.

landmarks designated for the course and direction of the route. On this point the settled conclusion is,† that the presiding deities or regents of the places or regions indicated are guides to the soul, who forward it on its way in its helpless condition, destitute of exerted organs, all its faculties being absorbed and withdrawn; as a blind man is led, or a faint person is conducted, by a guide.

The route deduced from the tenour of texts compared, and from divers considerations set forth,† is by a solar ray to the realm of fire; thence to the regents of day, of the semilunation, of the summer six months, of the year; and thence to the abode of gods; to air or wind, the regent of which forwards the journeying soul from his precincts, by a narrow passage compared to the nave of a chariot wheel, towards the sun: thence the transition is to the moon, whence to the region of lightning, above which is the realm of Varuna, the regent of water; for lightning and thunder are beneath the rain-cloud and aqueous region: the rest of the way is by the realm of Indra, to the abode of Prajápati or Brahme.

A question arises, which is here discussed, whether Brahme, to whose dwelling and court the soul is conducted, be the supreme being, according to the ordinary and chief acceptation of the term, or be that effect of his creative will which is distinguished as carya brahme, identified with the mythological personage entitled Hiran'yagarbha, as having been included within the golden mundane cgg. Jaimini affirms the supreme one to be meant: but Bádari maintains the other opinion; which is that which the commentators of the sútras understand the author of them to adopt.‡

The souls of those holy persons only, whose devout meditation was addressed to the pure Brahme himself, take the route described; § not those whose contemplation was partial and restrictive: they have their special reward. Those, too, whose knowledge of God was more perfect, pass immediately, or by any route, to a reunion with the divinity, with whom they are identified.

The soul of him who has arrived at the perfection of divine knowledge, and is consequently liberated, "quitting its corporeal frame, ascends to the

^{*} Bhavade'va instances Pátalipura and the Són'a river, as indicated for the direction of the route from Tírabhucti (Tirhút) to Váránasi (Benares). It is clear that he understands Pátalipura (the ancient Palibothra) to be Patna.

⁺ Br. Sútr. 4. 3. § 1-4. (S. 1-6.) ‡ Ibid. § 5. (S. 7-14.) § Ibid. § 6. (S. 15-16.)

supreme light which is Brahme, and comes forth identified with him, conform and undivided;" as pure water, dropped into the limpid lake, is such as that is.

Concerning the condition of the liberated man, a difference of doctrine is noticed.† Jaimini maintained, that he is endued with divine attributes, omniscience, ubiquitary power, and other transcendent faculties. Audulómi insisted, that he becomes sheer thought, sentient intelligence. The author of the sútras (Bádaráyan'a) accedes to the last-mentioned opinion; admitting, however, the practical or apparent possession of divine faculties by one who has attained perfection of knowledge.

'By certain devout exercises and meditation a less perfect knowledge is acquired, which, as before mentioned, qualifies the possessor of it for reception at Brahme's abode, though not for immediate reunion and identity with his being. In that condition transcendent power is enjoyed. The pitris, or shades of progenitors, may be called up by a simple act of the will; and other superhuman faculties may be similarly exerted. The possessor of these is independent, subject to no other's control. He may, at his option, be invested with one or more bodies, furnished with senses and organs, or be unincumbered with a corporeal frame. On this point, however, a difference of doctrine subsists. Jaimini maintained the indispensable presence of body; Bádari, its absence; and the author (Bádaráyana) admits the option. In one case, the condition is that of a person dreaming; in the other case, as of one awake.

'Master of several bodies, by a simple act of his will, the Yogi does not occupy one only, leaving the rest inanimate, like so many wooden machines. He may animate more than one, in like manner as a single lamp may be made to supply more than one wick.

Liberation (mucti), besides its proper and strict sense, which is that of final deliverance through a perfect knowledge of Brahme, and consequent identification with the divinity and absorption into his essence, is likewise employed in a secondary acceptation for that which takes effect in life-time (jivan-mucti); or which conducts the soul after death to dwell with Brahme; not, however, divested of a subtile corporeal frame. The more complete

[•] Br. Sútr. 4. 4. § 1-2. (S. 1-4.) + Ibid. § 3. (S. 5-7.)

[‡] Hárda vidyá or Dahara-vidyá in the Ch'hándógya.

[§] Br. Satr. 4. 4. § 4. 5. (S. 9-14.)

deliverance is incorporeal (vidéha mucti). The less perfect liberation appertains to a Yógi, similar, in respect of the faculties and powers possessed by him, to one who has accomplished the like by the observances taught in the Sanc'hya or Yóga of PÁTANJALI.

Such a Yôgi, uncontrolled and independent as he has been pronounced to be, can exert every faculty and superior power analogous to that of the divinity's, which may be conducive to enjoyment; but he has not a creative power. His faculties are transcendent for enjoyment, not for action.†

The more perfect liberation is absolute and final: there is no return of the soul from its absorption in the divine essence, to undergo further transmigrations as before.[‡] But incomplete knowledge, which conducts to Brahme's abode without qualifying the soul for such absorption into the divinity, exempts it from return during the subsisting calpa; but not at a future renovation of worlds, § unless by special favour of the deity.

Recapitulation.

In the foregoing summary of the Védánta from the sútras of Vyása, the interpretation by S'ancara has been relied upon; and his gloss, with notes of his annotators and the commentaries of scholiasts who follow him, have been exclusively employed, lest the doctrine of separate schools and different branches of the Védánta should be blended and confounded. Those commentaries are numerous, and explanations and elucidations of the text have been taken from one or from another indiscriminately, as they have been found pertinent and illustrative, without particular preference or selection. This should be borne in mind in comparing that summary with its authorities, as it has not been judged necessary, nor generally practicable, to cite the particular commentary that is especially used in each instance.

Some remarks will be now added, in which other authorities are likewise employed, and chiefly the elementary works mentioned in the introduction of this essay.

The principal and essential tenets of the Védánta are, that God is the omniscient and omnipotent cause of the existence, continuance, and dissolution of the universe. Creation is an act of his will. He is both

[•] Bhavadéva on Br. Sútr. 4. 4. S. 22. + Br. Sútr. 4. 4 § 7. (S. 17-22.)

[‡] Ibid. S. 22. § On this point the commentators do not appear to agree.

^{||} Védánta-súra, Védánta-paribháshá, &c.

efficient and material cause of the world: creator and nature, framer and frame, doer and deed. At the consummation of all things, all are resolved into him: as the spider spins his thread from his own substance and gathers it in again; as vegetables sprout from the soil and return to it, earth to earth; as hair and nails grow from a living body and continue with it. The supreme being is one, sole-existent, secondless, entire, without parts, sempiternal, infinite, ineffable, invariable ruler of all, universal soul, truth, wisdom, intelligence, happiness.

Individual souls, emanating from the supreme one, are likened to innumerable sparks issuing from a blazing fire. From him they proceed, and to him they return, being of the same essence. The soul, which governs the body, together with its organs, neither is born; nor does it die. It is a portion of the divine substance; and, as such, infinite, immortal, intelligent, sentient, true.

It is governed by the supreme. Its activity is not of its essence, but inductive through its organs: as an artisan, taking his tools, labours and undergoes toil and pain, but laying them aside reposes; so is the soul active, and a sufferer by means of its organs; but, divested of them, and returning to the supreme one, is at rest and is happy. It is not a free and independent agent, but made to act by the supreme one, who causes it to do in one state as it had purposed in a former condition. According to its predisposition for good or evil, for enjoined or forbidden deeds, it is made to do good or ill, and thus it has retribution for previous works. Yet Gop is not author of evil; for so it has been from eternity: the series of preceding forms and of dispositions manifested in them has been infinite.

The soul is incased in body as in a sheath, or rather in a succession of sheaths. The first or inner case is the intellectual one (vijnyánamaya): it is composed of the sheer (tan-mátra), or simple elements uncombined, and consists of the intellect (buddhi) joined with the five senses.

The next is the mental (manômaya) sheath, in which mind is joined with the preceding. A third sheath or case comprises the organs of action and the vital faculties, and is termed the organic or vital case. These three sheaths (cós'a) constitute the subtile frame (súcshma-s'arira or linga-s'arira) which attends the soul in its transmigrations. The interior rudiment confined to the inner case is the causal frame (cáran'a-s'arira).

The gross body (sthúla-śarira) which it animates from birth to death in any step of its transmigrations, is composed of the coarse elements, formed

by combinations of the simple elements, in proportions of four-eighths of the predominant and characteristic one with an eighth of each of the other four: that is, the particles of the several elements, being divisible, are, in the first place, split into moieties; whereof one is subdivided into quarters; and the remaining moiety combines with one part (a quarter of a moiety) from each of the four others, thus constituting coarse or mixed elements.* The exterior case, composed of elements so combined, is the nutrimentitious (annamaya) sheath; and being the scene of coarse fruition, is therefore termed the gross body.

The organic frame assimilates the combined elements received in food, and secretes the finer particles and rejects the coarsest: earth becomes flesh; water, blood; and inflammable substances (oil or grease), marrow. The coarser particles of the two first are excreted as feces and urine; those of the third are deposited in the bones. The finer particles of the one nourish the mind; of the other, supply respiration; of the third, support speech.

Organized bodies are arranged by the védántins in either four or three classes: for both which arrangements the authority of passages of the véda is cited. Their four classes are the same with those of other writers; but the threefold division appears to be peculiar to this school. It is, 1st. viviparous (jivaja), as man and quadrupeds; 2d. oviparous (an'd'aja), as birds and insects; 3d. germiniparous (udbhijja).† The latter, however, comprehends the two terminating classes of the fourfold distribution, vermin and vegetable; differing but as one sprouts from the earth, the other pullulates from water: the one fixed, the other locomotive. To both, equivocal and spontaneous generation, or propagation without union of parents, is assigned.

The order in which the five elements are enumerated is that of their development: 1st. the etherial element (ácás'a), which is deemed a most subtile fluid, occupying all space and confounded with vacancy: sound is its particular quality. 2d. Wind (váyu), or air in motion: for mobility is its characteristic; sound and feel are sensible in it. 3d. Fire or light (téjas), of which heat is the characteristic; and by which sound, feel, and colour (or form) are made manifest. 4th. Water (ap), of which fluidity is characteristic; and in which sound, feel, colour, and taste occur. 5th. Earth (prithiví or anna), of which hardness is characteristic; and in which sound, feel, colour, taste, and smell are discernible.

^{*} Véd. Sára. 136. † S'anc., &c. on Br. Sútr. 3. 1. § 3. (S. 21.)

The notion of ether and wind as distinct elements, an opinion which this has in common with most of the other schools of Indian philosophy, seems to originate in the assumption of mobility for the essential character of the one. Hence air in motion has been distinguished from the aerial fluid at rest, which is ácás'a, supposed to penetrate and pervade all worldly space; and, by an easy transition, váyu (wind) and motion, come to be identified, as ácás'a (ether) and space likewise are confounded.

An organized body, in its most subtile state of tenuity, comprises sixteen members (avyaya) or corporeal parts, viz. five organs of sense, as many instruments of action, and the same number of vital faculties; to which are added mind (including intelligence, consciousness, and sensation); or, distinguishing mind and intellect (buddhi) as separate parts, the number is seventeen.

The vital faculties, termed $v\acute{a}yu$, are not properly air or wind, but vital functions or actions. Considered, however, with a reference to the proper meaning of that term, they are by some explained to be, 1st respiration, which is ascending, and of which the seat is the nostril; 2d, inspiration (or otherwise explained, flatus), which is descending, and which issues from the lower extremity of the intestine; 3d, flatuousness, which is diffused through the body, passing by all the veins and arteries; 4th, expiration, ascending from the throat; 5th, digestion, or abdominal air, of which the seat is the middle of the body.

According to a different explanation, the first is respiration; the second, inspiration; the third, a mean between the two, pulsation, palpitation, and other vital movements; the fourth is expiration; and the fifth is digestion.

Three states of the soul in respect of the body are recognized; to which must be added a fourth, and even a fifth, viz. waking, dreaming, profoundly sleeping, half-dead, and dead. While awake, the soul, associated with body, is active under the guidance of providence, and has to do with a real (pdramárthici) and practical (vyavahárici) creation. In a dream there is an illusory (mdyámayi) and unreal creation: nevertheless, dreams prognosticate events. Dreaming is the mean (sandhya) between sleeping and waking. In profound sleep the soul is absent, having retired by the channel of the arteries, and being as it were enfolded in the supreme deity. It is not, however, blended with the divine essence, as a drop of water fallen into a lake, where it becomes undistinguishable; but, on the contrary, the soul continues discriminate, and returns unchanged to the body which it ani-

mates while awake. Swoon, or stupor, is intermediate between sleep and death. During insensibility produced by accident or disease, there is, as in profound sleep and lethargy, a temporary absence of the soul. In death it has absolutely quitted its gross corporeal frame.

Subject to future transmigration, it visits other worlds, to receive there the recompense of works or suffer the penalty of misdeeds. Sinners fall to various regions of punishment, administered by Chitragupta and other mythological persons in the realm of Yama. The virtuous rise to the moon, where they enjoy the fruit of their good actions; and whence they return to this world to animate new bodies, and act in them, under providence, conformably with their propensities and predispositions, the trace of which remains.

The wise, liberated from worldly trammels, ascend yet higher, to the abode and court of Brahme; or, if their attainment of wisdom be complete, they at once pass into a reunion with the divine essence.

Three degrees of liberation or deliverance (mucti) are distinguished: one incorporeal, which is that last-mentioned, and is complete; another imperfect, which is that before-mentioned, taking effect upon demise, when the soul passes to the highest heaven, the abode of Brahme. The third is effectual in life-time (jivan mucti), and enables the possessor of it to perform supernatural actions; as evocation of shades of progenitors, translation of himself into other bodies called into existence by the mere force of his will, instantaneous removal to any place at his pleasure, and other wondrous performances.

These several degrees of deliverance are achieved by means of certain sacrifices, as that of a horse (as'wamédha), or by religious exercises in various prescribed modes, together with pious meditation on the being and attributes of God: but the highest degree of it is attainable only by perfect knowledge of the divine nature, and of the identity of God with that which emanated from him, or was created of his substance and partakes of his essence.

Questions most recondite, which are agitated by theologians, have engaged the attention of the *védántins* likewise, and have been by them discussed at much length; such as free-will (swátantrya), divine grace (is'wara-prasáda), efficacy of works (carman) or of faith (s'radhá), and many other abstruse points.

On the last-mentioned topic, that of faith, nothing will be found in the

text of BADARÁYANA, and little in the gloss of S'ANCARA. Its paramount efficacy is a tenet of another branch of the Védánta school, which follows the authority of the Bhagavad-gitá. In that work, as in many of the Puránas, passages relative to this topic recur at every turn.

The fruit of works is the grand subject of the first mimánsá, which treats of religious duties, sacrifices, and other observances.

The latter mimins more particularly maintains the doctrine of divine grace. It treats of free-will, which it in effect denies; but endeavours to reconcile the existence of moral evil under the government of an all-wise, all-powerful, and benevolent providence, with the absence of free-will, by assuming the past eternity of the universe, and the infinite renewals of worlds into which every individual being has brought the predispositions contracted by him in earlier states, and so retrospectively without beginning or limit.

The notion, that the versatile world is an illusion (máyá), that all which passes to the apprehension of the waking individual is but a phantasy presented to his imagination, and every seeming thing is unreal and all is visionary, does not appear to be the doctrine of the text of the Védánta. I have remarked nothing which countenances it in the sútras of Vyása nor in the gloss of S'ancara, but much concerning it in the minor commentaries and in elementary treatises. I take it to be no tenet of the original Védántin philosophy, but of another branch, from which later writers have borrowed it, and have intermixed and confounded the two systems. The doctrine of the early Védánta is complete and consistent, without this graft of a later growth.

II. Description of the Ruins of Buddha Gáya. By Dr. Francis Buchanan Hamilton, M.R.A.S.

(Extracted from his Report of a Survey of South Bihar.)

Read May 5, 1827.

Buddha Gdya was probably, at one time, the centre of religion in India, and the residence of a powerful king. I am informed by the mahanta of the Sannyásís, who now possesses the great convent at the place, that when his predecessor Chétan Gírí came, which may be perhaps one hundred and twenty years ago, it was antirely overrun with bushes and trees; and the sect of Buddha, in its vicinity, may be considered as completely extinct. A few persons, indeed, come occasionally from distant countries to visit its ancient monuments. Last year (1811) a man of some rank, with several attendants, came from a country called Tamsa-dwip-mahá-amarapura-paigú, sent by Mahá-dharma-rájá, in the sixty-seventh year of his age, a Cshatriya of the family of the sun. This is, no doubt, the king of the Burmas; and hence we infer that the old man, since the year 1795, when I visited his capital, has been induced to set up the doctrine afresh. In the year 1795 the priests of Buddha were seriously alarmed at the influence which the Bráhmans had then acquired.

Some years before, the king of Ava sent two messengers, who, in speaking *Hindustáni*, called themselves *Vazirs*, by which I know they meant officers of government. They were in search of the holy places rendered remarkable by the actions of Gautama, and took with them the water of many sacred streams and pools, to form a bath for their master.

Both these people had books, by the assistance of which they pretended to trace the holy places and to detail their history.

It would appear that the Sannydsis have, in some degree, been infected with the superstition of the place, and confounded by its numerous images, which have struck them with awe. The first mahanta resided in the ruin of the temple; and his successors have purposely erected several small buildings, both near the old temple and in their convent, where they have

placed many of the most remarkable and entire images; and they have put in the walls of the buildings raised for other purposes, a still greater number, of both images and inscriptions. This, the mahanta says, was done partly with a view to ornament, and partly with a view to preserve the images from injury; both of which views might have been unaccompanied by religious awe: but that this last has had some effect, I am persuaded, from several circumstances: 1st, the mahanta always spoke of Gautama by the names of Muni, or Bhagaván, the former signifying holy, and the latter, deity. 2dly, he continued to harbour and support one of his samyásis, who had been converted by the messengers from Ava, and now altogether rejects the doctrines of the orthodox. (This person accompanied me to such of the places in the district as had been pointed out to him as holy by the messengers from Ava, and told me what he recollected of their discourse.) Sdly, the mahanta gives an allowance to a family of Rájputs which acts as pújáris to the temple; and not only takes care of various small buildings erected by his predecessors among the ruins, and of the sacred tree, but offers flowers and water to Mahámuni, and preserves the image from injury. These Rájputs are orthodox, and reconcile their duty to their consciences by having given orthodox names to all the images of which they have charge, and by considering Mahámuni as an incarnation of VISHNU.

In my account of the religion of the Burmas,* it is mentioned that four great lawgivers, or gods of the sect of Buddha, have appeared on this earth; and, according to the Italian orthography of the missionary Sangermanno, these persons are named Chauchaom, Gonagom, Gaopa, and Godama; the doctrine of the latter being alone followed in that country. In Ceylon the same is the case; and the names of the four lawgivers, according to Captain Mahony's orthography,† are Kakoosandeh, Konagammeh, Kaserjeppe, and Gautemeh. These names are, no doubt, the same with those given above, only differently corrupted; but the appellations assigned to the four lawgivers of the sect by the converted sannyásí are very different. He calls them Mahámuni, Chándámuní, Sákyamuní, and Gautamamuni; all of whom were Buddhas, that is, very holy persons: but there have been many other such persons; and he says that, as Buddha is merely a title common to many, it is highly improper to speak of such a person as Buddha having been born at such or such a time, or having performed certain actions; and, in fact,

^{*} As. Res. vol. vi. p. 269.

⁺ Ibid. vol. vii. p. 32.

when I was in Ava, I very seldom heard the term Buddha used. The same would also seem to be the case in Ceylon: for although Captain Mahony generally calls GAUTAMA by the name of Boodha, yet that is probably in compliance with the common custom of the Hindus: and in his account there is a passage (p. 39) which would seem to condemn the practice as improper. In the Amarakosha this doctrine mentioned by the convert is also fully implied. GAUTAMA is not mentioned among the synonyms of Buddha, which are, Sarvagna, Sugata, Buddha, Dharmardja, Tathagata, Samantabhadra, Bhagaván, Márajit, Locajit, Jina, Shatabhigna, Daśabala, Adváyavadí, Vináyaka, Munindra, S'rivvanah, S'ástá, and Muni, but he is called a Muni, and might have been in the same manner called a Buddha, a Bhagawán, or any other of the above-mentioned synonyms; but, in speaking of him, such appellations should be joined to some of his various names, as Sákyamuni, Gautama-Buddha, or the like. These names, by which Gau-TAMA is known according to the Amarakosha, are S'ákyamuni, S'ákyasimha, Sarvárthasiddha, Sauddhódani, Gautama, Arkabandhu, and the son of Máyádevi. It must be observed, that in the commentary (tiká) annexed, this person is said to have been descended from Sákya, who by the convert is called the third lawgiver of the Buddhas, and must not be confounded with his descendant, one of whose names is, indeed, very similar.

Among the orthodox Hindus, Buddha is not considered as synonymous with Bhagaván, a deity, or Muni, a saint, but is always spoken of as one personage, an incarnation of VISHNU; and in an inscription found at Buddha Gáyá, of which a translation has been published in the Asiatic Researches (vol. i. p. 284), this is fully stated. It is, therefore, mentioned by the author of the inscription, that Buddha, the incarnation of a part of VISHNU, and the same with Hari, appeared at the commencement of the Kali-yug, in a wild and dreadful forest, and that Amara, one of the nine jewels of the court of Vikramáditya, having discovered this place of the supreme being in the forest, caused an image to be made and a holy temple to be constructed; and therein were set up the divine foot of Vishnu, the images of the Pándus, of Brahmá, and the rest of the divinities. This place, according to the inscription, is called Buddha Gdya, and the forefathers of him who shall perform the śraddha at this place shall obtain salvation, as is mentioned in the Váyu-purán. And that it may be known by a self-evident testimony that AMARA erected the house of Buddha, the author of the inscription has recorded the event on a stone, in the year of the era of Vikrama

1005 (A.D. 948). As Amara and Vikrama are usually considered contemporary, and as the circumstance is expressly stated in the inscription, it might be considered as very strange, how an inscription engraved 1005 years after the time of Amara could be considered as a testimony of that person having erected the temple; but Mr. Bentley, in his treatise in the eighth volume of the Asiatic Researches (page 242), has shown that Amara lived long after the commencement of the era of Vikrama, and not far from the time here assigned; it may therefore be alleged, that the inscription was made by AMARA, and that this person built the temple of Mahamuni. That AMARA may have built the present temple is very probable; but that he could have composed this inscription, appears to me impossible. It mentions that, in the temple built by AMARA, that person placed images of five sons of *Pándu*; but the small building containing these is evidently a very recent work, in which some old images of the Buddhas have been placed, and now named after these heroes. Besides if AMARA built the great temple, he must have been of the sect of Buddha; and the story of a Buddha-Avatár is considered by these heretics as altogether void of truth. That AMARA was not orthodox, I am told, is clear, from his having omitted, in the beginning of the Amarakosha, to use any sign of a true believer. And that he was of the sect of the Buddhas, I am assured, is proved, by the synonyms which, as I have mentioned above, he gives for a Buddha and for GAUTAMA; and farther, these synonyms are not compatible with his having been the author of the inscription in question. I have no doubt, therefore, that this inscription is modern, and was composed by some person of the sect of VISHNU, and has been erected to account for the continuance of the worship paid at this place to the pippali tree, which, in compliance with ancient superstition, has been ordered in the Gáya Mahátmya. I presume that it is on some such authority as this, that certain theorists have imagined the followers of the Buddhas to be a branch of the sect of Visinu. The inscription in question has probably been removed by the person who transmitted a copy to the Asiatic Researches, as I met with none such.

The sect of Buddha, as well as the orthodox Hindus, believe that this earth is now in the fourth age of its existence, and that another age will come. Each age has had a lawgiver; and GAUTAMA's authority, according to the Burmas and Ceylonese, is now established. They therefore commence the Kali-yug, or fourth age, with his appearance; and the different systems on that subject have occasioned various periods to be assigned for

that event. It was agreed by both of the parties that came from Ava. that GAUTAMA resided at Buddha Gayá, and that, at his desire, a temple was built by Dharma Asóka, king of Pádaripuk, who held his court at the place. The visitant who came last, according to the Mahanta, placed this event, or the commencement of the Kali-yug, about 2,100 years before the year 1811, while the convert gave 5,000 years for the era. This latter date was evidently in conformity with the opinions prevailing now in India, the convert being unwilling to cede in antiquity to the pretensions of the Bráhmans. The computations of Ceylon and Siam place Gautama in the sixth century before the birth of Christ, which I take to be his real era; for the Mahanta said that he could not speak with precision concerning the date which his visitors from Ava gave, as he had omitted to take it in writing. It is said by the convert, that the temple is not dedicated to GAUTAMA but to Mahámuni, or the earliest lawgiver of the present earth: and he said that the messengers from Ava merely venerated the place on account of its having been the residence of GAU-TAMA, considering the influence of Mahámuni to be extinct.

That a temple may have been built here in the time of GAUTAMA, and that it may have been dedicated to Mahámuni, and that perhaps some of its remains may be found among the ruins, is highly probable; but that the present edifice is so ancient, is more than doubtful. I think it, however, probable that, from that time, the temple did not go entirely to ruin until the overthrow of the Pál Rájas, and was repaired, or perhaps in a great measure rebuilt, from time to time, as it went to decay, being the chief seat of the religion which seems for many ages to have predominated in this country; on which account it was called Mahábuddha by the messengers from Ava. The tradition, already mentioned, of a temple having been built by Amarasingha, in the tenth century of the Christian era, seems to me exceedingly probable, if referred to the great building which is now in the last stage of decay compatible with any thing like a preservation of original form.

I now proceed to mention the present appearance of the ruins, which are situated a few hundred yards west from the Nitajún river, on a plain of great extent. They consist of two parts, situated north and south from each other.* That to the north is the largest, being 1,482 feet by

^{*} A plan of the ruins is deposited in the East-India Company's Museum (No. 77).

1,006 in its greatest dimensions, and is called the rájast'hán or palace. On the east, north, and west faces, are traces of a ditch; and on the west and south are remains of an outer wall or rampart, with the appearance of there having been a ditch between it and the palace: but by far the greater part of the building seems to have been a large castle or palace, which probably contained many small courts, although these have been entirely obliterated by the operation of time. Except where there are traces of a double wall and ditch, the whole is now an uniform terrace, consisting chiefly, as is said, of bricks, but covered with soil. Nor is there any reason to suppose that the kings of Magadha ever lived here since the time of Dharma Asóka or his immediate successors. On this ruin has lately, but at different periods, been erected a building containing two temples, with an adjoining habitation. One of the temples contains the hideous Jagannáth, and was built by the father of the present occupant: the other is a temple of Ráma, built by Ganga Bái, who died a year or two ago.

Immediately south from the palace, and separated from it by a road, was the temple, which has left a ruin about 800 feet from east to west, and about 480 feet from north to south. This also seems to have consisted of various courts, now mostly reduced to irregular heaps of brick and stone; for immense quantities of materials have been removed. The largest heap now remaining is at the north-east corner, where there is a very large terrace, on which are two modern small temples. The one farthest east is called Vagiswari, and was erected by one of the Mahantas of the great convent of Sannyásis. The image placed in it was dug from the ruins; and in its new name no attention has been paid even to sex, as it represents an armed male, while Vágíswarí is the goddess of eloquence. history of the other temple, called that of Tárádévi, is similar. image which has been selected, in place of having the form of Tárá, one of the most hideous of the female destructive powers, represents a mildlooking prince standing on a throne supported by seven Buddhas.* At the east end of this terrace, in order to procure materials for building, there is now forming a great excavation. The workmen have laid open a chamber of brick, a cube of about twenty feet, without window, door, or stair, which could only have been intended for a tomb. Although the followers of Gautama in Ava burn the dead, yet the bones and ashes are always, I

^{*} A drawing of this image is deposited at the East-India Company's Museum (No. 92).

believe, buried; and I know that those of the priests, at least, are preserved in monuments: and the custom seems to have prevailed among the Buddhists of India, for the late Mr. Duncan informs us,* that in digging into extensive ruins about four miles north from Banáras, an inscription was found, along with some bones, in an urn, and an image of a Buddha; and Mr. Duncan rationally conjectured that these bones belong to some votary of Buddha, which indeed is confirmed by the inscription; it terminates with the sentence usual as a form of dedication on the images of this district, and mentions that Styhira Pál, and his elder brother Basanta Pál, king of Gour, in the year 1083 of Sambat (A.D. 1062), came to Kási, performed worship, enriched the city, and ordered all those who did not follow the Buddhas to embrace that sect. The chamber, therefore, now opened in the ruins of Mahábuddha, was in all probability a tomb.

South from the terrace, and separated from it by a road, which is said to have been covered by an arch, and to have extended all the way to the river, has been a large range of buildings; but the greater part of the materials has been removed, and there only remain some heaps of broken bricks and images, one of which is very large and curious. It seems to me to represent a prince who has lost his wife, and she is figured lying above his head, and attended by two mourners. The inscription contains merely the usual form of dedication. It is possible that this may have been the royal sepulchre, or at least the place where the monuments of the princes were placed. South from thence has been a small tank.

The arched road above-mentioned led between the two masses now described, into the area of the great *Mandir*, or shrine; the only part of the building that remains at all entire. On the right, as you enter the area, is a small chamber of brick, which contains an image, and has every appearance of being modern; which is also the case with two small chambers on the left; but one of them is evidently alluded to in the inscription given in the first volume of the Asiatic Researches, lately quoted. This, which is nearest the entrance, contains several large images, said to have been collected from various parts of the ruins, and built into the wall: five of them, representing an equal number of *Buddhas*, sitting in the usual manner, are commonly said to represent the five supposed sons of *Pándu*.

^{*} As. Res. vol. v. p. 131.

[†] East-India Company's Museum, No. 98.

One of them seems clearly to me a funeral monument.* The dead body is laid over the head of the *Muni* or *Buddha*, through whose favour he may be supposed to have reached the upper regions, and is accompanied by two mourners. The inscription is not thoroughly understood by my people, and some of the letters are defaced. It commences with the form of dedication usual among the *Buddhas*, but all that follows is interpreted in quite a different manner by each of three pandits whom I consulted.

The other small chamber is the tomb of the first Mahanta of the convent of sannyásis.

Between these buildings and the porch of the great shrine is lying a stone, containing the impression of a Buddha's feet, and by the convert called Buddhapad; but there can be little doubt that this is the Vishnupad alluded to in the first volume of the Asiatic Researches. It has evidently been taken from the ruins, several similar having been carried thence to the convent; and round it many images have been heaped. By this mark of the deity's presence is lying a stone, which contains an inscription of considerable length.† Several of the images collected here have inscriptions. The most remarkable image‡ is one called Sabitri (a goddess), but which seems to be a male votary of the Buddhas, having a Muni seated on his crown, for he resembles a prince. The inscriptions mention no person's name, but invoke the Buddhas.

On a male figure at the same place, now called Saraswati (a goddess), is the usual pious sentence of the Buddhists.

The great shrine, or *Mandír*, is a slender quadrangular pyramid of great height; but its summit is broken, and a part hangs over in a very singular manner. This spire is, on three sides, surrounded by a terrace about twenty-five or thirty feet high, and the extreme dimensions of which are seventy-eight feet wide by ninety-eight long, and one end of this terrace towards the east has covered the porch; but that has fallen, and brought down the part of the terrace by which it was covered.

A stair from each side of the porch led up to the terrace, on which there was a fine walk round the temple, leading to the second story of the shrine in front, and to a large area behind, on which is planted a celebrated pippal tree (Ficus religiosa). As this is still an object of worship,

^{*} E. I. C's. Mus. No. 82.

[†] Ibid. No. 91.

[†] Ibid. No. 113.

[§] Ibid. No. 99.

and frequented by pilgrims from Gáyá, as I have already mentioned, the north side of the terrace has been repaired as a road; and some zealous person has lately built a stair on the outside, so that the orthodox may pass up without entering the porch, and thus seeing the hateful image of Bud-The Mandir has been covered with plaster, some remains of which shew that it has been subdivided into numberless projecting corners, petty mouldings, and niches, each containing the image of a Buddha in plaster; and on each projecting corner has been placed a stone somewhat like a bee-hive,* having a Buddha carved on each of its four faces, with a hole in the top for incense. The number of such now scattered over the country is almost inconceivable. The porch has always been small; and since it fell, some persons have cleared away the ruins and constructed a gate of the fragments. The shrine or cavity in the Mandir that is on a level with the ground, and the entrance to which was through the porch, is small, and covered with a Gothic arch, the plaster-work on which has been divided into small compartments, each containing an image of a Buddha. The whole far end of the chamber has been occupied by a throne of stone (singhdsan) in a very bad taste, and which has been disfigured by a motley row of images taken from the ruins, and built on its front, so as to hide parts of the deity. This is a monstrous mis-shapen daub of clay, and has been well enough represented in a drawing published, if I recollect, by the late Col. Symes. The extreme rudeness of this image may, perhaps, be considered as a proof of great antiquity; and this may have been the original image placed here in the time of GAUTAMA, round which the temple has been constructed. There is, however, current a tradition of the original image having been gold, and of its having been removed by the Muhammedans; so that the present image is supposed to have been made after the sect had undergone persecution, and could no longer procure workmen capable of making a decent substitute.

Above this chamber are two others, one on the level of the old terrace, and the other still higher; but with these the falling of the porch has cut off all communication. Several of the people, however, in the vicinity, remember the porch standing, and have frequently been in the chambers, a stair from the terrace leading to the uppermost. This was quite empty, and was probably the place where treasure was deposited. The middle

chamber has a throne, but the image has been removed; and if there ever was an image of gold, this was probably its place.

The terrace enlarges behind the temple, towards the west, and forms an area, on which is growing the pippal tree, which the orthodox suppose to have been planted by Brahma. The worshippers of Gautama, on the contrary, assert that it is placed exactly in the centre of this earth, and They say that it was planted by Dugdha-Camini, call it Bódhidruma. king of Singhal-dwip (Ceylon), 2,225 years before A.D. 1811; that is, according to them, 125 years before the building of the temple. The tree is in full vigour, and cannot, in all probability, exceed a hundred years in age; but a similar one may have existed in the same place when the temple was entire. Around its root has been lately raised a circular elevation of brick and mortar in various concentric stages; and on one of these has been placed a confused multitude of images and carved fragments of stone, taken from the ruins. On the pedestal of one of these images, representing a man with a woman sitting on his knee, which is one of the most usual figures in the district, the messengers from Ava carved an account of their visit, of which a copy is given,* and which must render us cautious in admitting the inscriptions on the various images in this district to have any connexion with their worship or erection.

The number of images at Buddha Gáya is very great; and there is scarcely any one form of those that are scattered so numerously about the whole country, for eight or ten coss in all directions, which may not be found in its immediate neighbourhood belonging to the great temple. This also seems to me to have been the quarry, as it were, from which almost the whole of those, for eight or ten coss round, have been carried. Many which are now worshipped by the orthodox, and no doubt have a strong resemblance to, and many attributes of, the gods of the present Hindus, seem to me to have had the same origin. It is evident, indeed, that the people are totally careless in this respect, worshipping males by the names of females, and female images for male deities. Nay, some of the images which they worship are actually Buddhas in the most unequivocal forms; while on, or over the heads of others there are representations of these lawgivers, as testifying their superiority. Another mark, by which most of these images may be known to have belonged to the Buddhas, is

^{*} East-India Company's Museum, No. 109.

the enormous size and distention of the lobe of their ears, which is very general in the images of this district, and even prevails in many of such as have in other respects the most decided appearance of the idols now worshipped. Another mark still, by which the convert asserts that all images formed by this sect may be distinguished, is a mark on the palm of the hands and soles of the feet, which is supposed to resemble the lotus flower.

In the drawings* I have given representations of many of the most curious images remaining in the immediate vicinity of the old temple, and built into the walls, or deposited within the convent of the Sannyásis, and all confessedly taken from the ruins.

The converted Sannyásí pretends, that during the present existence of the world, except those of the four munis or lawgivers, none of these images were ever worshipped by the followers of the Buddhas; and that all the others were intended as ornaments, or monuments to represent either the various inferior beings of power (Dévatás) who are admitted to exist by his sect as well as by the orthodox, or various persons whom their own vanity, or the affection of their own relations or disciples, wished to commemorate. This, I know, is the doctrine now entertained in Ava by the followers of GAUTAMA, and which would, of course, be taught to him by the messengers through whom he was converted: but I have great doubt how far it is applicable to the followers of the Buddhas who formerly existed in this country. In Népál I know that the Buddhists worship all the Dévatds, and especially Siva and the destructive female power; and I think it probable, that the Buddhists here did the same. The number of lingas, single, in rows, or in clusters, simple and adorned with human faces, crocodile heads, &c. is fully equal to that of the munis, both at Buddha Gáya and Barágáng; and some of the images of the destructive female power are so remarkable and large, that I think they must have been intended as objects of worship. There can be no doubt, however, that by far the greater part of the host of images in the more decorated temples of the Hindus of all sects, is merely ornamental; and I think it probable, that most of the images of the Buddhas have been intended to represent the great multitude of such personages as have in former revolutions of the world obtained everlasting bliss, and were never in-

^{*} East-India Company's Museum, No. 78 to 101.

tended to be worshipped, nor even reverenced. In the whole number, the messengers of Ava pointed out only four images, which they considered as representing the four munis or lawgivers who had appeared in this world, and which they knew by various annexed emblems. In the account of the embassy to Ava has been given a drawing of Mahamuni, who was worshipped in the great Mandir.

I directed drawings to be taken of the other three, which have been removed into the convent of the Sannydsis, to protect them from injury; but one only, which represents Gautama,* was executed. neglected to draw Chandra muni and Súkya muni, which, they said, exactly resembled each other and an image previously drawn: but this, probably, is a mistake. The image, which they had previously drawn, may, indeed, have had a strong resemblance to both, and may be the same with one of them; but the other must be distinguished by some emblem that escaped their notice. The images representing the Buddhas, whether lawgivers of this world or not, are easily known by a simple robe, a natural human shape, placid countenance, curled hair, and long ears. Although the image above-mentioned is said to represent Gautama, there is nothing in the inscription to ascertain that it was intended for an object of worship. It would appear from the tenor that JAYA-skn and Kumára-skn, sons of Pun-YABHADRA, son of SAMANTA (all untitled persons), erected the image as a monument of their father's holiness. Another image,† according to the inscription on it, was erected by a Rájá VIJAYABHADRA, of whom nothing more is known.

^{*} East-India Company's Museum, No. 78.

[†] Ibid. No. 79.

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III. Observations respecting the Small-Pox and Inoculation in Eastern Countries; with some Account of the Introduction of Vaccination into India. By WHITELAW AINSLIE, M.D. M.R.A.S.

Read June 16, 1827.

There was a time, when to treat of the small-pox must have been a task truly painful; when, alas! little more could be done than to trace its devastations and its horrors: but, thanks to heaven and the perseverance of the benevolent, those days are long past, and the subject can at length be viewed in a very different light. Relieved from the distressing office of but too frequently having to offer a vain consolation to a virtuous mother sorrowing for the loss of a darling child, medical men can now speak of the disease with far other feelings; with the same satisfaction, to use a metaphor, that is felt in painting the blessings of an honourable peace, which have succeeded to a long and disastrous war; or the joy of a private family, which has finally risen into comfort and security, through a protracted struggle of domestic affliction.

Much difference of opinion has existed with regard to the period when the small-pox, or as it has lately been scientifically named, the *emphyesis variola*, made its first appearance in the world; and some authors have believed that this disorder, as well as the *measles*, with which it was in early ages confounded, were coeval with the human race. We certainly have no proof that either the Greeks or Romans were acquainted with it: at least no account is to be found in any of their works which perfectly agrees with its pathognomonic signs, minutely examined as those works have been, for the purpose of such discovery, by several of our most distinguished writers.† That it raged in China long before it was observed in Europe, is

^{*} It would seem, however, that both Salmasius, and after him Johannes Hahn, a Dutch writer, had entertained a different opinion, and supposed that the disease had been described under another name (anthrax) by Hippocrates, and noticed by Celsus, Galen, and Ætius: a supposition so absurd, that it cannot for a moment be listened to.*

[†] See Mead's medical works, vol. i. p. 229; also Willan on the Diseases of the Skin, vol. i. pp. 251-252.

a fact no longer doubted. Every one conversant with the history of the variola must have heard of a Chinese treatise on it, entitled Taou-tchin-fa, in which it is stated, that it did not show itself in that part of the world sooner than the year 1122 before Christ; and Father d'Entrecolles, a Jesuit, mentions having seen a work in which it is described as a malady of the earliest ages. Many maintain that India gave birth to this hydra: and it has, unquestionably, been a dreadful scourge in that country from the most remote antiquity; a truth of which the reader may easily be assured by turning to Sonnerat, 'Voyages aux Indes Orientales,'t and also to a curious account of inoculating for the small-pox in the East-Indies, by J. Z. Holwell, published in 1767.

Rather varying information has been given of the goddess who is supposed by the Hindus to preside over this plague on the continent of India, and on Ceylon. By the sástra which Sonnerat consulted, it appears that Mariatalé (Mariyatáli), the wife of Chamadaguini (Jamadagni), and mother of Parapourama (Parasu-ráma), was the divine being in question, and that the power of healing this dreadful affection was bestowed upon her by the deities named Dévélkers. Temples are dedicated to her, and festivals celebrated in her honour; some of the ceremonies of which are of a nature so cruel‡ as to be highly reprobated by even the Brahmins themselves. In some tracts of southern India she is supplicated, worshipped, and her wrath deprecated, under the name of Mariammá; in others lying farther north, under that of Sítalá: § hence the Hindustani appellation of a parí sítlá, by which the small-pox is well known to the Mahometans.

Philip Baldwus has said, in his work entitled "A true and exact Description of the East-Indies," published in 1664, that in Ceylon the small-pox goddess is called Patagráli. He has given us a print of her, as having a tremendous form, with eight faces and sixteen arms; and asserts that she was the daughter of a god called Ixora (I'swara). Be all this as it may, certain it is, as already advanced, that the evil in question has been felt and dreaded,

^{*} See Moore's excellent History of the Small-Pox, p. 23. † Tom. i. p. 244.

[‡] At one of those ceremonies a man is suspended in the air by means of a cord run through the fleshy part of his loins. In this way he is whirled round at the extremity of a long pole, and at a great height from the ground.

[§] This goddess is painted as a yellow woman sitting on a water-lily. Worship is offered at her shrine on the 7th, 8th, and 9th of the increasing moon; on the 10th the image is thrown into the water.—See Ward's View of the History, Literature, and Religion of the Hindus, vol. i. p. 174.

not only in India, but in several of the adjacent territories,* from time immemorial; and it is but too true, that till the good effects of vaccination began to be there experienced, in no region of the earth were its ravages more appalling. Not rarely did it happen, that whole villages were depopulated: the distemper, besides, but too often assumed its most malignant form (variola pustulis numerosis confluentibus), which, amongst the natives, proved so generally mortal, that the relations of the poor sufferers, on discovering its putrid nature, not unfrequently cut asunder the ties of human affection, and deserted them altogether, moving off to a different part of the country, or to the opposite and windward side of a town, with such of the family as either had the disease of a milder kind (variola pustulis paucis discretis), or had hitherto escaped the contagion.

Hillary† speaks of the small-pox and measles as "originally hatched and " bred in, and properly indigenous to Arabia, probably in its most southern " districts." Mead, on the other hand, thought it commenced its havoc in Africa, and more especially in Ethiopia: a notion which appears to be confirmed by Dr. John Reiske, of Leyden, who being well versed in Arabic literature, ascertained from certain relics, that about the year of our Lord 572, the same in which Mahomet was born, Ethiopian traders carried the malady for the first time into Arabia. Dr. Friend, however, was of an opposite opinion; and in his "History of Medicine" tells us, that he believes it was first brought into Egypt during the caliphat of OMAR, about the year of Christ 640, by the Arabians, who had been infected by some Eastern or remote nation: and why not, we should add, according to the testimony of Webster,‡ by the Hindus? " Ab India orientale in Egyptum, inde in Ara-" biam, denique in Europam, variola pestis illa gravissima, commigrasse " videtur." Although, by this quotation, the learned physician seems to have thought that the small-pox had, on its way from the East, reached Egypt previously to its committing its ravages in Arabia; at all events, once established there, we can readily conceive how quickly it must have been spread by the Saracen conquerors.

Baron Dimsdale says: "it is granted that the small-pox was imported from "Asia by the crusaders, and did not shew itself in Europe before the thir-

^{*} See an account of an embassy to Thibet, by Captain Samuel Turner, in 1800, pp. 219-220.

[†] See Woodville's History of the Small-Pox,vol. i. p. 2.

[‡] Vide Medecin. Prac. System. Carol. Webster, edit. tom i. p. 288.

" teenth century:" a statement which we cannot reconcile with the facts, that both Constantius in Italy and Avenzoar in Spain, had noticed the evil as common in those dominions, in the eleventh century. Nay, we know that Mr. Moore, in his history * of the disease, gives us a curious account of the primary introduction of both it and the measles into Spain, by means, of a Saracen invasion, occasioned by a rape committed by a king, and the consequent vengeance of a beautiful woman, as far back as the year 710. At what time Britain was first made to feel the effects of a disorder which other nations already lamented, it is impossible exactly to determine. We can only say with confidence, that by the earliest British medical writers, which were those of the thirteenth century, the complaint is generally noticed. New Spain, according to Garcia, was originally visited by it in 1520, when he declares it proved fatal to half the people of the provinces to which the infection extended. Then again we learn from Mr. Condamine, in his "Mémoire sur l'Inoculation," p. 61, that about fifty years after the discovery of Peru, this affection was carried over from Europe to America by the way of Carthagena. Now, as Peru was discovered by Pizarro in 1526, it would appear by this account, that the variola did not reach America before 1576, which but ill agrees with what has been stated by Garcia. In addition to all this I must here observe that, according to Robertson, Hispaniola | suffered dreadfully from the small-pox in 1517: but as such discussion may be considered as a little foreign to my subject, referring as it does more immediately to Eastern countries, I briefly hint, before proceeding to further particulars, that the small-pox in a northern direction did not arrive at the frozen region of Greenland¶ before the year 1733, when it nearly carried off the whole of the inhabitants.

Whatever may be the varying sentiments regarding the era when the small-pox first shed its malignity on mankind, or its subsequent propagation, the same differences do not exist with respect to the writer who first

^{*} See History of the Small-Pox, page 76.

[†] Dr. Woodville, however, from an examination of many books in the British Museum, states that he has reason to think the small-pox was known in our island long before the Crusades began, in 1096.

[‡] Garcia, Origin. p. 88, cited by Robertson in his History of America, vol. iii, p. 400.

[§] See Robertson's History of America, book iii.

[|] Ibid. book iii.

[¶] Grantz's History of Greenland, vol. i. p. 336.

published on the subject. Asron of Alexandria, a distinguished author in the time of Mahomet, gave some account of the disease, according to the testimony of Rhazis,* who himself treats both of this and the measles, and who is, indeed, as Woodville justly allows, the principal amongst the old physicians in whose works, still extant, the attention of the world was called to the then reigning calamity. Aaron was a very voluminous writer, an adept in medicine as well as a priest of Alexandria, when that city was besieged by the Saracens, and was by every account highly esteemed in Arabia. is a curious fact, that this learned man does not take the least notice of the contagious nature of the small-pox, but supposed it to proceed from an ebullition of the blood.† He it was, by all I can learn, who originally adopted the hypothesis of an adust blood and bile, of corrupt humours, and, what is interesting to know, of "refrigerants which could retain pustules, and warm medi-" cines which could expel them externally:" realities which formed the basis of that method of treating the malady, by the free admission of cool air and other antiphlogistic means, first distinctly suggested by Sydenham,‡ afterwards improved by Boerhaave, and finally meliorated and established by Cullen in 1779. The next authors, in order of time, who wrote on the disorder, were Bachtishua and John the son of Mesue. The first was physician to the Caliph Almanson, in the eighth century; and, according to Rhazis, | maintained that the measles were occasioned by blood mixed with a large proportion of bile. and that the small-pox proceeded from an over gross and moist blood. The latter (John the son of Mesue) flourished towards the beginning of the ninth century; though, according to some, at a later period, he was a physician at the court of Haroun al Raschid, and renowned for his general learning as well as professional zeal.

Of the labours of the Arabian writers just mentioned, but a few scattered fragments have escaped the ravages of time; but the works of *Isaak* the Israelite, remain. The exact time in which he lived cannot be distinctly ascertained; but, from the order in which *Hali Abbas* quotes him, it may have been in the ninth century. He would seem to have been an intelli-

^{*} Vide Rhazis de variolis et morbillis. Edit. Canning.

[†] See Dr. Mason Good's "Study of Medicine, vol. ii. p. 619.

[‡] Born at Winford Eagle in Dorsetshire, in 1624.

[§] Born near Leyden, in 1668, and became the most celebrated medical writer and practitioner of his day.

^{||} Vide Rhazis.

gent and amiable man, and thoroughly acquainted with the Greek authors of all descriptions.

Serapion treated slightly of the distemper, and dwells much on the advantage to be derived from a light acescent diet. He lived and published towards the end of the ninth century; cites Mesue, who practised physic at Bagdad A.D. 795, and is himself referred to by Rhazis. This last-mentioned medical sage, for so he was reckoned, was named after a city of Khorassan, Rhei, in which he was born. He wrote, as already stated, professedly de variolisiet morbillis, obtained great repute towards the beginning of the tenth century, and was the first who remarked that there were instances of the small-pox having occurred twice, and even thrice,* in the same person. Abulpharagius† speaks of him under the name of Muhammed Ebn Zacharia al Razi. Pocock makes him to have died in 930, and informs us that he was not only an able physician, but skilled in music, philosophy, and astronomy.

In the course of time came Hali Abbas, who was named by the Saracens Mhalŭki, and was of the order of the magi. This distinguished Arabian wrote his famous Regalis Dispositio about the year 980: it is a general treatise on the healing art, dedicated to Caliph Eddoulat, and was translated from the Arabic into Latin by Stephanus, in 1492. Farther, however, than having made an approach to the discovery of the contagion, as the erudite Mr. Moore well calls it, Hali Abbas did little towards making mankind better acquainted with the true nature of the small-pox. He confounded it with the measles. He had some strange notions of the disorder being probably produced by the dregs of the milk, the better portion of which had been taken away by the suckling child, and betrays in many parts of his work that he was a great borrower from Hippocrates.

It is not necessary for my present purpose, that I should enumerate all the ancient Eastern or other authors, who may have at different times treated of a complaint which continued in those days to spread terror and dismay. If the reader is curious on the subject, he may find much relevant and well-arranged information in a work which I have repeatedly alluded to, Mr. Moore's History of the Small-pox. Suffice it here to observe, that up to the fifteenth century, there appeared in succession the far-famed Avicenna, born at Bokhara in A.D. 992, who spoke decidedly of the con-

Vide Rhazis Contin. lib. xxiii. cap. 8.
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tagiousness of both small-pox and measles* (the last disease, however, he looked upon as no other than what he calls a bilious small-pox); Avenzoar, who was a native of Seville and a cotemporary of Avicenna; Constantius, who lived towards the end of the eleventh century, and was born at Carthage: he was a medical practitioner of great note, having studied at Babylon as well as Bagdad; Averrhoes, a Spanish Moor, who wrote on Medicine in the twelfth century: he translated Aristotle, and published a work entitled Colliget; Albucasis, who gave to the world a book named Al Tarif, more in repute for some judicious surgical opinions than any thing new it contained: he also wrote in the twelfth century; Gilbert, who composed a compendium of medicine, and which is the oldest English medical tract now extant: Dr. Friend conjectured that he flourished about the end of the thirteenth century, in the reign of the first Edward, though we have no testimony that, on the subject of small-pox, he brought forward one original idea; after him came Gentili of Foligno, and Herculaneus, both of whose writings are involved in all the erroneous doctrines of Avicenna; and lastly, John of Gaddesden, who was author of the famous dissertation on medicine known by the appellation of the "English Rose," and who, though he was principal physician to Edward II., has, in his chapter on small-pox and measles, omitted few of the mistakes of the Arabians.

From the fifteenth up to the middle of the seventeenth century, the science of medicine continued gradually to improve. Many ridiculous theories, however, regarding the variolous disease were broached during that period; till, as we have seen, our distinguished countryman, Sydenham, dispelling those clouds which had long darkened the medical horizon, brought to light a new era in physic: nor was the brilliancy of his reputation, as has been well said by an able writer,† in any way obscured by his immediate successors, great as they were, Etmuller, Boerhaave, and Cullen.

Perhaps no disease, to which the human frame is subject, has excited more laborious discussion than the small-pox; yet, after all, little of a positive nature has been ascertained respecting it, beyond the facts, that it is produced by a specific contagion, or a matter, as it has been called, *sui generis*; that it rarely happens that the same person is attacked twice by it; that it is distinguished into a mild and malignant sort; and lastly, that the Almighty

^{*} Vide Avicen. Canon, lib. iv. tom. 1. cap. 6.

has, in his mercy, bestowed on mankind no less than two powerful weapons with which to combat it: these are *Inoculation* and *Vaccination*. How the small-pox could at first have originated sets all conjecture at defiance; and it must be difficult to account for this singularity regarding it, that although nothing but variolous matter, under some modification or other, has the effect of generating the disease, yet it seems to be more prevalent at some seasons than at others; as if its appearance was consequent on a peculiar state of the air; an idea which has been held very cheap by the author just cited, as well as by others.

Many physicians of note believe that the small-pox contagion is limited to a very narrow circle, and that it is rarely conveyed by the wind to a distance; and we know that Dr. Haygarth in his "sketch of a plan to exterminate this malady from Great Britain," tells us that certain facts appear to exhibit negative proofs, that open air is not contaminated by it to a greater distance from the patient than one thousand five hundred feet, and probably not to one hundredth part of that space: how then did it happen, it may be asked, that for years together in India, previous to the practice of vaccination, the malady was not heard of in some districts; then, without a possibility of its being traced to any evident cause, did it come like a pestilence, spreading with rapid strides, and sparing neither sex nor age nor condition? So much was the calamity dreaded, that religious ceremonies were, and I presume still are, performed annually in every village to deprecate the scourge; humble supplications were made by people of all ranks at the shrine of the small-pox goddess; and prayers offered up, calling on her to take under her care such as might be suffering from, or had not yet been visited by, the terrible affliction.

The mild disorder variola discreta is called in Tamul Peri ammay, in Telinga, Pedamma; in Pali, Kruivan; in Sanscrit Masúriká; and in Dukhanie, Bari-sitlá: it may be found treated of in various Tamul sastras, common in Lower India; but more especially in that named Vaittiya Vaghadam Airit Anyûru, a medical work by Agastya. The same complaint is termed by the modern Arabians, Ableh الما also Aljuderi; and by the Malays, Cachar تاجار; a well written treatise on it in Arabic is entitled منابع المحدري والحصية, and was composed by Abu Jafar Ahmed bin Muhammed. In a Sanscrit book common in Ceylon and written in the Singalese cha-

[•] See Woodville's History of the Small-pox, p. 3. + See Dr. Wilson on febrile diseases.

racter, entitled Madhava Nidhana, consisting of 1,875 verses, the smallpox is fully described. To the confluent form the Tamuls have given the appellation of Panisheri ammai, and both this and the simple affection assume nearly the same appearances in India that they do in colder countries; with this difference, that in the hot climate, owing, it may be presumed, to the stimulus of heat, the distemper is evidently a little accelerated It is a singular fact that the small-pox most frein all its stages. quently shews itself in the East in the cold season; that is, on the Coromandel coast, from the end of November to the middle of February; and I have also observed that, in general, at that period, it is more apt to be severe than in the warm and dry weather. For this last peculiarity it might be difficult to assign a cause, unless we are allowed to suppose that those who have the disease suffer more from being, in the cold months, closely pent up in their small huts (which, owing to their clay floors, mud walls, and straw roofs, must be extremely damp*), instead of being allowed to lie in open verandas, as they had been in the hot season, where they enjoyed at least a free circulation of air, and were at the same time screened from the mid-day heat.

By Dr. Hillary's† account of the small-pox in Barbadoes, however, it would seem to have appeared there generally in the months of March, April, and May, which constitute in that island the warm and dry season of the year. It is strange that Moseley, who wrote professedly on the disorders of hot climates, should not mention the malady; nor does Dr. Hunter, in his "Diseases of Jamaica," take the least notice of it; though I perceive that it has found a place in a little work entitled "Letters and Essays on some of the West-India Complaints," by Mr. Quier,‡ in which he informs us that the small-pox began to shew itself a little before Christmas in 1767; at first mildly, but as the season advanced it grew frequently fatal, and as summer came on it was often of the worst kind. In Minorca, which though not a tropical, is a hot country, Cleghorn§ tells us that the disease was epidemic in 1742 and 1746. When it first appeared in 1742, the inhabitants were astonished, as they had not seen the disorder for the last seventeen years,

^{*} To the great dampness of Cork, owing to its situation and other causes, Dr. Walker ascribes the severity of the small-pox in that city. See his work on the Small-pox.

⁺ See his Diseases of Barbadoes, p. 17.

[‡] See Work, pp. 4 and 5.

[§] See Cleghorn's Diseases of Minorca.

but remembered well the havor it had then committed. In fact, as far as I can learn, no part of the world, with the exception, perhaps, of some of the smaller lately discovered islands, is now altogether exempt from the evil. In Ceylon^a it was often of the worst kind; in Java (where it is termed ketumbaun), in Sumatra, and in China,† it was terrible; nor was it less so in the Malayan Peninsula and in all the different Eastern islands. At Banda and Amboina it had been observed to shew itself once in six or seven years; but, alas! the visits, "though far between," were generally most baneful in their consequences.

Inoculation for the small-pox, I should suppose, must have been known and practised, in some provinces of Asia, at a more remote period‡ than we can by any authentic records ascertain; nor is it a matter of great consequence, to obtain any very minute information as to the time. I think it probable that this method of rendering the complaint milder may have been had recourse to in different countries, without any communication whatever having taken place betwixt them on the subject; and, in all likelihood, was discovered in each by observing the consequences arising from chance contact, when the pustules were broken: in the same way that the cow-pox was first noticed by milk-maids, or those employed in handling the cows. Many conjectures have been given to the world: Mr. Maty was of opinion, that the regions lying betwixt the Caspian and Euxine seas, were the centre from which inoculation spread: for this supposition, however, Dr. Woodvilles thinks there are no satisfactory grounds. D'Entrecolles has remarked, that the Tartars were entirely ignorant of it in 1724: and the same author has observed, that in the province of Kean-nan, and in the other eastern parts of China, it is more frequently resorted to than in the western. Whether China or India has the prior claim to the discovery of inoculation, is a point still undetermined. Some Jesuits scruple not to say, that it was from the former transmitted equally to India and to Europe. Again, we learn from Chais's "Essai Apologétique sur la Méthode de communiquer la Petite-verolle par Inoculation," as well as from other authorities, that it was practised in

^{*} See the Rev. J. Cordiner's Description of Ceylon, vol. i. p. 254.

[†] See Dr. John Clark's Diseases of Long Voyages, vol. i. p. 128.

[‡] See the Rev. W. Ward's View of the History, Religion, and Literature of the Hindoos, vol. iv. p. 339.

[§] See his History of Inoculation, vol. i. p. 86.

in Hindustan from the most remote antiquity. Condamine, while at Naples in 1769, was told that inoculation had been common there from time immemorial; and Dr. Russell* has stated, that the Turkman tribes had been in the habit of inoculating for ages past. Nay, something very like this is also expressed by Niebuhr, with regard to the adoption of it amongst the Arabians.† Of the exact epoch at which this method of mitigating the distemper first attracted notice in England, we have sufficient testimony; it originated in a communication made by Dr. Emanuel Timoni, a Greek, who had studied at Oxford and Padua, to his friend Dr. Woodward, from Constantinoplet in 1713, in consequence of having witnessed the good effects of it in that city; which communication was afterwards published, in 1714, in the Philosophical Transactions: and it is as well known, that Lady Wortley Montague's daughter was inoculated in London with success in 1722, by Mr. Maitland, who had performed the same operation on her son, a short time before, at Constantinople, and who lost no time in disseminating the blessing throughout the British dominions. In South Wales, however, and in the Highlands, \$\square\$ inoculation is considered by some to have been practised by the old women at a period antecedent to its introduction from the East: and I do not think it at all improbable, countenanced as the assumption is by a letter from Dr. Wright to Mr. Bevan, which may be found in the Philosophical Transactions for 1722, and also by Dr. Monro's account of vaccination in Scotland.

Although we cannot say that inoculation was ever very generally adopted in India by the natives, yet it is sufficiently well understood, that it is practised there, and in various modes, in different provinces. It is in the hands of a particular tribe of Brahmens; but who, though they are remunerated for their labours, are, I fear, often more mysterious than industrious in their avocation. Mr. Moore gives a full account of the method pursued in some of the northern tracts of Hindustan, as described, I think, by Mr. Holwell; and notices the necessary prayers that are recited during the ceremony of the operation, as appointed in the *Atharva Veda* to propitiate the small-pox

^{*} See an account of inoculating in Arabia, in a letter from Dr. P. Russel, Phil. Trans., vol. lvi. p. 140.

[†] See Niebuhr's account of Arabia, p. 123, French edition.

[†] Into which city it would appear to have been introduced from the Morea.

[§] See Dr. Wilson's Work on Febrile Diseases, vol. ii. p. 286.

The Rev. W. Ward informs us, that inoculation is performed not by the regular doctors (vaidya), but by a lower order of Brahmens (Daivajnya), at any period of the year, but chiefly on the 7th, 8th, and 9th of the increase of the moon. This valuable writer also tells us (vol. iv. p. 839), that the variolous matter is introduced into the child's arm nearly in the same way that it is in Europe; but the place chosen is just above the wrist; in the right arm of the male, and the left of the female. I found, while in the Ganjam circar, that inoculation had been prevalent there when the European conquerors first got possession of it; and I have no doubt, from what I witnessed and have since heard, that it must have been customary in that district for many ages past. There is this peculiarity in the fact, that it is not amongst the Gentoos who inhabit the range of low and richly cultivated country along the sea shore that the salutary precaution is usually resorted to, but amongst men comparatively less civilized, who talk a barbarous dialect, have a dissenting form of religion, and who live in the more inland and hilly country. They are called Worriahs, and are distinguished by boldness, hardihood, and attachment to their respective rajas: a brave, handsome race, who cherish independence, and usually build their castles in the most inaccessible and woody recesses of their mountainous dominions; by which means they but too often have it in their power to give infinite trouble to our regular troops, in times of disaffection and revolt. Here, as in Upper India, it is by a class of Brahmens that inoculation is practised; they assume an exclusive right to it, and from the circumstance of their being priests and physicians combined, they can not only exercise their healing skill, but by their pretended immediate intercourse with the goddess who presides over the disease, can either petition for a mild affection, or in cases of danger, supplicate for the safety of the patient; seldom failing, on such occasions, to carry the little sufferer to the image of the goddess, before which it is bathed with the same water that had been offered at the shrine. The Worriah word for small-pox is Tikarāni: to inoculation they have given the name of Tikar, and the inoculators are called Tikar Brahmens. A dose or two of some opening medicine is, for the most part, given previously to the operation being performed; and great care is taken that the child has no eruption on the skin. The infection is conveyed by means of

[•] See his View of the History, Literature, and Religion of the Hindus, vol. i. p. 174.

a sharp instrument, which is first inserted dry under the cuticle, and after having been moistened at the point with the variolous matter, is inserted in the same incision, and there kept for a short time. The part commonly chosen for the reception of the virus is on the outer and upper part of the wrist. Both arms are inoculated at once; and immediately after the office is performed they are slightly bound up, the patient being also ordered to take a little of the virus internally, mixed up with rice in the form of a pill. From this period till the fever comes on, he is ordered to be bathed twice or thrice daily in cold water, is cautiously kept from the sun's rays, and when the pustules are ripe they are all opened with a needle. With the exception of a little unrefined sugar (jágarí), nothing in the way of medicine is given; and this is administered rather as it makes also a part of the offering to the goddess, than from any notion of its virtues.

In the pure habits of the Hindus it may easily be imagined that the inoculated small-pox is almost constantly benign; and this mildness, together with the simplicity of the operation, added no doubt to the powerful influence of custom for centuries, made the inhabitants of India not a little reluctant to the introduction of vaccination. At all times blindly devoted to their ancient modes, interwoven as they are with their religious doctrines, beyond perhaps any people on earth, they are strongly averse to whatever innovations might lead them to forsake the usages of their ancestors; and why they should give a preference to a new method of combating the disorder, which they felt had already been rendered sufficiently innocent, they neither could comprehend nor wished to have explained to them.

Previously to the introduction of vaccination into India, inoculation for the small-pox was almost invariably attended with the happiest effects amongst the European inhabitants. The time of life selected for receiving the disease was generally after the child had cut all its first teeth; and the season of the year, that which ensues after the rains are over. But, with all its advantages, inoculation must still be allowed, for many obvious reasons, to be far inferior to the recent and more extraordinary discovery of vaccination, for most of what is practically valuable in which the world stands indebted to the observations and patient investigation of Dr. Jenner, who, prompted by the best feelings of humanity, and supported by the spirit of ingenious research, most happily established one of the greatest blessings that was ever bestowed on man.

With regard to the origin of the Jennerian disease, for so it ought perhaps to be called, there has been not a little discussion. The Illyauts of Persia say it is found upon their milch sheep. Dr. Jenner himself...in his tract above cited, has traced it from the heels of the horse* to the hipple of the cow, and from that to the hands of the dairy-maid. This notion met with considerable opposition; and many experiments were in consequence made to ascertain whether the cow-pox could or could not be produced by the matter of grease applied to the udder of the cow. Woodville, Coleman, and others, attempted to bring the regular malady into action in this way, and failed; though it would appear that subsequent experiments by Dr. Loy were attended with an opposite result; and, from the facts adduced by this last-mentioned gentleman, we are led to conclude that Dr. Jenner was correct in his opinion; and that a person who has been infected with the disorder from a horse's heels, becomes equally unsusceptible of the small-pox contagion as if he had had the common vaccine disease. From Dr. Loy's conclusion we are induced to believe, that there are two kinds of grease to which the horse is subject; one merely local, the other attended with constitutional and febrile symptoms; and that it is from the eruption which accompanies the latter, only, that the fluid can be obtained which produces the genuine cow-pox vesicle: and, in this way, some late writers have accounted for the non-success of Dr. Woodville and others, who may not have made choice of the proper disorder in the horse. Further investigation might have been made, to put the point in question for ever at rest: though, after all, it is perhaps of little consequence. To have found the cow-pox producing fluid in the purest of all animals (the cow), ought surely to be sufficient guarantee for our most confident repose.

The discovery of vaccine inoculation in England naturally excited great interest and curiosity amongst the inhabitants of other territories, and whilst they admired and adopted it, they were not a little anxious to obtain, if possible, the wonderful preservative, from the cows of their respective countries. Dr. Lewis Sacco of Milan, in his treatise on the cow-pox, informs us that the cows of Lombardy are subject to this affection, and that it is contagious in the herd. C. Favo, vaccine inoculation director, addressed a

^{*} See Dr. Jenner's Inquiry into the Causes and Effects of the Variolæ Vaccinæ, p. 6.

[†] Loy's Account of some Experiments on the Origin of the Cow-Pox, p. 20.

[‡] See Annals of Medicine, vol. ii., p. 263.

letter to Dr. Woodville, from Milan, dated 7th of November 1801, in which he observed that he was the first person in Italy who found that the cow-pox prevailed amongst the cows of that part of the world. In America, after much industrious research, this singular vesicle was discovered by Dr. William Buel of Sheffield, in the state of Massachusetts, on the cows of that place, about the middle of May 1801: it was also found in the state of Connecticut by Dr. Elisha North of Goshen, as well as by Dr. J. Trowbridge of Danbery; and there is no doubt, that it has been met with in several other of the American provinces. I should rejoice if I could here add, that we had been equally fortunate in India; but, alas! in no part of those vast dominions, as far as I can learn, is the vaccine disease at present to be found on the cows; neither has the exact affection of the horses' heels, which has obtained the name of grease, been seen. It is more than probable, however, that on the cows of the adjoining country of Butan t the complaint might be discovered, were it diligently sought after: as that is a land, notwithstanding its low latitude (from 26° 30' to 28° 50' north) in which are found many of the productions of Europe, owing to its great elevation above the level of the sea. It must be remarked, that I have said that the vaccine disease cannot at present be found on the cows of India. This expression I have used, as there are some grounds for believing that inoculation for the cow-pox was known in days of old to the Hindu medical writers. From a communication written by Calvi Virambam, a learned Hindu, and which appeared in the Madras Courier of the 12th January 1819, I make the following extract. "To substantiate the fact that the inoculation of the " cow-pox was known in remote times to the Vaidyas, it is only necessary " to refer to the Sacteya Grantha, attributed to Dhanwantari, and there-" fore undoubtedly an ancient composition. In one part of the work, after " describing nine several kinds of small-pox, of which three (one alabi, " being the confluent) are declared incurable, the author proceeds to lay " down the rules for the practice of inoculation. From this part the following "two excerpts are made; of the first of which the original is given in the " English character, and with it a literal translation: of the second the " original is not given, but merely the translation."

^{*} See Medical Repository, vol. v. p. 93.

[†] Extending from Chichacottah to Phari. See Turner's Embassy to Thibet, pp. 20 and 178.

Excerpt First, from the Sacteya Grantha.

- " D'hénu stanya ma' suchiva naránáncha, ma suchicá,
- " Tajjalam báhu muláchcha sastránténa grihitaván,
- " Báhu múlé cha sastráni ract'ótpatti caráni cha,
- " Tajjalam racta militam sphótaca jwara sambhayah."

Translation of the above.

"Take the fluid of the cow-pox on the udder of a cow, or on the arm between the shoulder and the elbow of a human subject, on the point of a lancet, and lance with it the arms between the shoulder and elbow until the blood appears; then mixing the fluid with the blood, the fever of the small-pox will be produced."

Excerpt Second, the Sanscrit Text being omitted.

"The small-pox produced from the udder of a cow will be of the same gentle nature as the original disease, not attended by fever nor requiring medicine. The diet may be according to the pleasure of the patient, who may be inoculated once only, or two, three, four, five, or six times. The pock, when perfect, should be of a good colour, filled with a clear liquid, and surrounded with a circle of red. There will then be no fear of the small-pox so long as life endures. When inoculated from the udder of a cow, some will have a slight fever for one day, or two or three days, and with this there will sometimes be a slight degree of cold fit; the fever will also be attended by a round swelling in the armipit, and the other symptoms of the small-pox, but all of a very mild nature. There will be no danger, and the whole will disappear.

(Signed) " CALVI VIRAMBAM."

*" Madras, January 2d, 1819."

Respecting the authenticity of the above I shall say nothing, as I am unfortunately not a Sanscrit scholar. The book, however, from which the quotation is said to have been made by Calvi Virambam, is well known in Lower India, and might easily be examined. I have myself many doubts; and it is certainly a presumption against it, that the disease is no longer to be found on the cows of that country. For the absolute existence of the cow-pox on the cattle of Persia, I am happy to say there are somewhat more immediate and substantial proofs, as shown by a letter

written by W. Bruce, Esq., resident at Bushire, to W. Erskine, Esq., of Bombay, which appeared in the Asiatic Journal for June 1819; and to which my attention has been called by my friend, Dr. B. G. Babington, late of Madras.

Extract from the above-mentioned Letter.

"When I was in Bombay, I mentioned to you that the cow-pox was "well-known in Persia by the Illyauts, or wandering tribes. Since my " return here (Bushire), I have made very particular inquiries on that " subject, amongst several tribes who visit this place in the winter, to sell " the produce of their flocks, such as carpets, rugs, butter, cheese, &c. "Their flocks, during this time, are spread over the low country to graze. " Every Illyaut whom I have spoken to on this head, of at least six or seven " different tribes, has uniformly told me, that the people who are employed " to milk the cattle caught a disease, which having once had they were " afterwards perfectly safe from the small-pox; that this disorder was " prevalent amongst the cows, and shewed itself particularly on the teats; " but that it was still more common among, and more frequently caught " from, the sheep. Now this is a circumstance that has never, I believe, " before been known, and of the truth of which I have not the smallest " doubt. To be sure on the subject, I made more particular inquiry of a " very respectable farmer who resides in my neighbourhood, named Malilla " (and whom Mr. Stephen Babington knows well). This man confirmed " every word that the Illyauts had said, and that his own sheep had it. " There may be one reason for the Illyauts saying that they caught the " malady oftener from the sheep than the cows; which is, that most of " their butter, ghee, and cheese, is made from sheeps' milk: their black " cattle yield very little, being more used for draught than anything else." Whatever may have been done formerly in India, vaccination, as it is now there practised, was first introduced into that country through the zealous exertions of European foreign physicians; a description of men whose humanity and philanthropy, thanks to heaven, flourished in spite of

all the restrictions of the French revolution. The cow-pock fluid was taken from cows in Lombardy by Dr. Sacco, and despatched by D. de Carro from Vienna to Bagdad, from which place it went by different stages to Bussora and Bombay. The infected threads sent to the last-mentioned place failed; but others, transmitted to Trincomallee, produced the vaccine disease there

in August 1802.* Little time was lost in disseminating the affection over Ceylon; and it was from that island that the first active virus was conveyed, by the ship Hunter, to Madras, where the boon was neither coldly received nor languidly circulated; and if the Indian world now enjoys in an eminent degree the benefit of Dr. Jenner's labours, it must be confessed that it was in a great measure owing to the judicious steps taken by Earl Powis, then Lord Clive, who was at all times watchful how he could best promote the real interests of the country which he governed. On this occasion his Lordship was very ably aided by the exertions of Dr. James Anderson, at that time physician general, and whose immediate charge the new arrival consequently became; this gentleman, with all that cheerful and active benevolence which ever distinguished him, and rendered his long life one continued study how to avert the calamities, and alleviate the sufferings, which are incident to mankind, lost not a moment in adopting the wisest method, not only for preserving the valuable stranger in perfect purity, but for rendering every corner of our Asiatic dominions a partaker of the gift. Nor did he rest satisfied here; but with admirable foresight, transmitted the vaccine virus to every distant and eastern kingdom or province within the range of his extensive correspondence. In the first establishing of vaccination at Madras, Dr. Anderson permitted no man to sleep at his post, fully aware of the inestimable value of the newly-discovered preventive, as well as the difficulty with which it had been brought to so remote a land. Government, at that time occupied with serious political affairs, were reminded by him how necessary it was that superintendents and subordinate vaccinators should be instantly appointed in different districts, to keep alive and spread the welcome present which they had just received; and that, as in the introduction of all that is novel in India, much reluctance might naturally be expected, he pointed out in what manner exhortatory proclamations should be made, and how pecuniary rewards and encouragement could with the greatest advantage be bestowed on those who proved most successful in prevailing on the natives to adopt the cow-pox inoculation. In a word, I hesitate not to say, that had it not been for the example and assiduity of this enlightened and amiable man, cordially assisted and encouraged as he was by the supreme authority, the variolæ vaccinæ would in all probability have long before this

[•] See Cordiner's Ceylon, vol. i. p. 255.

expired, amidst the hot winds, indolence, or other local obstacles peculiar to the regions of the torrid zone.

Vaccination, notwithstanding its many enemies* at one time in England. and the numerous real or pretended cases that have been brought forward against it, still preserves its original good name in India, pure as the breath of the animal from which it springs! Nor can I find, that when care has been taken to select the true disease with a perfectly transparent fluid; to take that fluid from the vesicle at the proper timet (not later than the seventh or eighth day); to avoid vaccinating persons who may have any breaking-out,‡ of whatever nature, on the skin; and by having invariably recourse to Mr. Bryce's test: § when those points have been attended to I repeat, I cannot find that vaccination has ever in that country, in any one instance, disappointed the hopes of the practitioner, or a mother's fondest wish. It is true, that, when the new disease was first brought to the Coromandel coast, there were a few blunders committed by inexperienced men, who mistook for the real malady some of those pustules which frequently appear on children in hot climates, and were astonished that they could not produce from them a disorder similar to what they had seen pictured in books or heard described; or, perhaps, they had trusted to the appearance of irregular vesicles, | and hastily deemed them sufficient. But mistakes of this nature were soon rectified; and for many years past no doubts have been entertained, either as to the exact facies of the true complaint, or as to the non-existence of those evils which it was said occasionally to leave

^{*} There are those who suppose that the preventive influence of the cow-pox fluid may perhaps only operate on the frame for a certain period or number of years, an evil which, if it does exist, might be obviated by repeating the operation of vaccination from time to time.

[†] By not attending to this caution, mischief is sometimes done by the production of a spurious disease; a fact clearly proved by Dr. Friesc, of Breslaw. See Med. Trans., vol. xiv. pages 233, &c.

[‡] An inestimable caution given us by Jenner.

[§] Which is, to vaccinate one arm from the other; when it will be found, that if the first operation has been effectual in bringing on the real constitutional disease, the second attempt will fail in producing the regular vesicle.—See Bryce on the Cow-Pox, page 207.

^{||} Dr. Willan describes three species of vesicles which have at times been mistaken for cowpox, but which do not wholly secure the constitution from small-pox.—See his work on Vaccine Inoculation, page 39. A degenerated cow-pox was also noticed by Sir Gilbert Blane; in it the vesicle is amorphous, the fluid often of a straw-colour or purulent, and the areola absent, indistinct, or confused.—See his examination before the House of Commons.

behind. It has been affirmed, and I believe with truth, that the cow-pox virus is rendered milder* by passing through the human frame; but this is what I could never put to the proof in India, from not being able to find the vesicle on the cattle: a fact which must lead to the caution of taking the virus from time to time from the cow, in order to preserve, as much as possible, its peculiar quality.

The small-pox supervening to regular vaccination has been called the modified disease, † and would appear to put on somewhat different appearances, owing to causes which it is not necessary here to enumerate. During my residence in India, after the introduction of the variola vaccina into that country, which was not more than twelve years, I never heard of a single death occasioned by vaccination, nor by small-pox coming on after it; nor do I think that, in the same period of time, I witnessed more than four well-marked cases of the modified disease. In three of these, the fever previous to the eruption was very slight, in the fourth it was more severe; but in all it disappeared, or nearly so, on the coming out of the eruption; that is to say, on the second or third day. The pustules, which did not in any of the cases amount to more than one hundred, were generally small, and contained a milk-like rather than a purulent fluid; and, in place of continuing to the eleventh or twelfth day before bursting, they dried and became light brown crusts on the fourth day; and there was this peculiarity in every instance, and I am not aware that it has been ever noticed in Europe. that there was a total want of that strong, singular, and rather loathsome smell, which constantly attends the common small-pox when the pustules are mature.

Another modified eruptive malady, which I have oftener than once met with in India, I can consider in no other light than as the hives (emphysis globularis) changed in its nature by vaccination, as the affection has nearly all the distinguishing symptoms of that disorder, as described by Dr. Heberden, that in a milder degree. In the modified complaint I could never perceive any feverish symptoms whatever, with the exception of a little restlessness in the child. About the second day, the pustules (if pustules

^{*} See Dr. Mason Good's Study of Medicine, vol. ii. page 596.

[†] For an excellent account of a varioloid epidemic which lately prevailed in Edinburgh and other parts of Scotland, with observations on the identity of Chicken-pox and modified Small-pox, see a work on the subject by Dr. John Thomson.

[‡] See Medical Transactions, vol. i. article xxii.

they can be properly called, which contain a watery fluid) felt hardish under the finger, as if made of horn, and on the fourth day dried up; so differing from the regular *hives* of India as well as Europe, in which the eruption is known to appear on the fourth day with little abatement of the fever.

This notion of a modified hives (emphyesis globularis) in India may appear questionable, when it is taken into consideration that none of the varieties of water or chicken-pock (emphyesis varicella) have ever yet been given by inoculation: a fact ascertained by the distinguished author just quoted. Yet I am not aware to what other cause than previous vaccination could be ascribed the peculiar mildness of a disease (hives), well known to be in its natural character, sufficiently inflammatory; an affection which, though it cannot be excited by inoculation, is known to attack people but once in the course of their lives.

When I first adopted vaccination in the Carnatic, I found that ever with the best virus, I often failed in producing the disease; till it struck me that if, previous to inserting the fluid, the arm was to be gently rubbed with a piece of dry flannel, so as to induce a slight degree of warmth, it might render the absorption more certain. This method I put in practice, and with success.

Considering that the vaccine vesicle cannot be, or has not yet been, found on the cows or sheep in India, the greatest care becomes necessary in that country to keep it up in proper purity in the human race; it may not, therefore, be of slight importance to be generally known, that it was discovered by the late much lamented Mr. Bryce of Edinburgh, that the crusts properly preserved from the air in a closely shut phial, preserve their active virtue for a great length of time, and may thus be transmitted to the most distant countries, and there produce the disease.

In propagating vaccination in our Eastern dominions, a good deal had been done previously to my leaving Madras in 1815; yet it is evident that still greater things might have been accomplished, had it not been for the perverse prejudices of the Hindus, which, however, I am happy to learn, are gradually giving way, as they become more and more satisfied of the value of the discovery. Annual reports of the progress in overcoming those obstacles were regularly made, in my time, to Dr. Jenner, by the different superintendents of vaccination of the three establishments; and, in fact, many praiseworthy measures taken, to add that distinguished individual in completely establishing the virtues of this extraordinary preservative.

By an account published at Madras by Mr. A. Mackenzie, it would appear that, from the 1st September 1806 to the 1st September 1807, there had been vaccinated at the presidency of Fort St. George and the subordinate vaccine stations subject to that authority, 243,175 persons of different sexes, castes, and ages. Mr. Haughton, assistant surgeon of the coast artillery, who returned from China in May 1809, informed me that he found the cow-pox in high repute at Macao, under the zealous direction of Mr. A. Pearson, surgeon of the Honourable Company's factory at Canton who had written a short treatise on it, which had been admirably translated into Chinese by Sir George Staunton. By an official report communicated by Dr. Christie, superintendent of vaccination in Ceylon, I perceive that in that island, during the year 1808, no less than 26,207 individuals had undergone the operation and had the genuine disorder; which made, in all vaccinated under that gentleman's care, since the introduction of it at Trincomallie in 1802, up to 1808, 103,036 persons of all ages. Subsequent and much more recent information* from Eastern countries, from India, Persia,† Java, China, Sumatra, and Manilla, give the most pleasing assurances of the success which invariably attends the adoption of the Jennerian disease in those distant regions; where a casual case of small-pox appearing after it has, from its great mildness, long ceased to alarm, and where the constant security which it affords against that horrific monster, the variola in its malignant form, have at length happily convinced millions, that if, from a powerful empire in the west came an inordinate thirst for dominion and the sword of the conqueror, thence also came the sympathizing heart and the healing hand.

Edinburgh, 20th December 1826.

^{*} Up to the years 1822 and 1823.

[†] It would appear by Morier's second journey to Persia, that, about the year 1810, the king of that country actually caused *ferashes* to be placed, in order to prevent the women from taking their children to the surgeons to be vaccinated; and this was done at a time when, from the anxiety of the natives themselves to adopt the preventive, there was every reason to hope that it would become general in Tehran. In 1816, however, we learn by a communication from the English ambassador at Ispahan, that the presumptive heir to the throne and fifteen of his suite had been vaccinated, and that the blessing was making rapid strides throughout the Persian dominions.—See Asiatic Journal for October 1816, and September 1818.

IV.—A Description of the Agricultural and Revenue Economy of the Village of Pudu-vayal, in that part of the Peninsula of India called the Carnatic. By John Hodgson, Esq., M.R.A.S.

Read June 16, 1827.

In submitting these notices to the attention of the Society, the object is to bring under its view the internal revenue economy of a Hindu village that has never been under the direct control of any European officer of the East-India Company, in order to exhibit a fair specimen of ancient usages in the south of India, and to shew with accuracy, the proportion of the produce of the soil customarily taken in kind, in latter times, as land revenue, the rights of the parties paying revenue, and those of the individual who, by grant from the sovereign, is entitled to collect that revenue.

These notices contain little that is new on the rights of the peasantry of the south-eastern part of the peninsula of India. The public records of the government of Madras from an early period, the report of the case tried in the Supreme Court at Madras in 1808, preserved in Sir Thomas Strange's notes, and the memoir prepared by the late Mr. F. W. Ellis, of the Madras civil service, all contain much interesting information on the landed tenures of the south of India. In this paper, therefore, I have merely endeavoured to render the subject intelligible to those who have not been in India, by divesting the description of all technical terms.

The village of Pudu-Vayal is situated about thirty miles north-west of Madras, in that portion of the Carnatic denominated the Company's Jagír. The village has defined boundaries. The lands, like those of some parishes in England, and in other parts of Europe, are held and cultivated in common, by the privileged members of the community. The other divisions of territory in India are of various denominations, according as Hindu or

Muhammedan terms are used to express them. The boundaries of all subdivisions of territory, including more than one village, are defined by the limits of the villages included in such subdivisions: they have not any boundaries of their own. The grant of a province including many villages would therefore be defined by a list of those enumerated in the grant. The boundaries are supposed to have been fixed when the villages were first settled (or, as the natives express it, when the village was born), and they frequently contain large tracts of uncultivated land, and even of land overgrown with brushwood or forest-trees, called jungle.

The village in question was made over by grant, in the year 1784, to a servant of Sir Eyre Coote. The conditions of the grant were, that he should collect the revenue payable to the sovereign according to the custom of the village; that he should pay to the sovereign (the East-India Company) out of that revenue, a reserved sum annually amounting to three hundred pagodas, or about £120; that he should retain for his benefit the difference between £120 and the annual revenue he might by custom be entitled to receive from the cultivators of the soil. The grant neither specified the amount of the revenue which the grantee was entitled to collect, nor the rate at which he was to collect it. It gave him, by grant, the sovereign's rights; it left those rights to be ascertained by custom, and, in case of dispute respecting the rights of either party, left the question to be decided by such authorities as the sovereign had appointed.

The lands within the boundary of this village consist of two kinds: one of which is irrigated by means of the water of the monsoon rains, preserved during that season in a reservoir called a tank; the other is not capable of irrigation, but is rendered productive by rain as it casually falls. A tank, in the part of India to which this description refers, is composed of a bank of earth carried along the declivity of a plain, so as to collect and retain the water running from a higher level. The tank of this village is a small one, of which the bank is not more than three-eighths of a mile long.

The total extent of land within the boundaries of this village is canis 548,† divided as follows:

^{*} In this manner the grant of a Jagir, in 1765, to the Company by the Nabob of the Carnatic, was a grant of villages, specified in a list or schedule attached to the grant.

[†] A cáni is 57,600 square feet. .

Land capable of irrigation, called in revenue language wet	*
land' Cánis	211
Land incapable of being irrigated, rendered productive by rain,	
called in revenue language 'dry grain land'	157 ² / ₁₆
Total arable land, wet and dry	368 <u>3</u>
To this quantity must be added what has been diverted to other	
purposes, or in revenue language called 'alienated land,' viz.	
By custom	
By grant $11\frac{\delta}{16}$	
. 10	37+1
	40514
Land entirely unproductive, as the bed of the tank, the burning	
ground, the treading-floor, &c. &c., including the site of the	$142\frac{2}{16}$
village	
The total land in the village register is then. Clinic	510
The total land in the village register is thenCánis	
The particulars of the land, and its revenue appropriated by custo as follows:	om, are
Pagoda or Church Lands.	
Cánis.	Cánis.
For the benefit of the temple of Siva $1\frac{9}{16}$	
For the benefit of the temple of Vishnu 1	
puparine	$2\frac{9}{16}$
Village Corporation Lands.	10
For the benefit of the hereditary village occupants generally	1
To the behelf of the hereattary things occupants generally the	_
Village Corporation Office Lands.	
For the registrar of the revenue and statistical accounts of the	
village	$11\frac{4}{16}$
For the village watchman	$9\frac{9}{16}$
For the village carpenter	1
For the village blacksmith	1
Appropriated by custom Cánis	26 <u>6</u>
The particulars of the appropriations by grant are as follows:	~~16
The barnemars of me abbrobitations by Right are as tonows.	

To Subramaniya Gurcal, a priest	$1\frac{6}{16}$	
specify in detail	918	11 ½
Appropriated by custom	•••••	$26\frac{6}{16}$
Total cultivated land, of which the revenue has been appropriated by custom or by grant	Cánis	37 1 8

The village occupants retain possession of and cultivate these $87\frac{1}{16}$ cánis, so that the grantees of these lands receive no more than the revenue which would have been payable by custom to the sovereign, supposing the land revenue had not been appropriated as described. The grantees have not possession of the land; and not one of the ten Brahmans alluded to as holding grants of land, resides in the village or cultivates the land of his grant. They send or go annually for the government revenue, which is paid to them in the same way as it would have been paid to the sovereign had no such transfer of his rights been made; but, with a view to keep on good terms with the cultivators of their grants, the grantees generally take less than the sovereign would take, that is, less than half the produce of the land. It is thus obviously advantageous to cultivators to cultivate the land of which the revenue has been assigned for the support of religious, municipal, or other institutions.

The revenue payable to the sovereign from this village is, by custom, a defined portion of the gross produce from all land cultivated, and not otherwise appropriated by grant or by custom. In seasons of drought there may be little or no revenue, even in grain. In seasons of abundant produce and low price, there may be a large grain revenue and a small money revenue. There is, then, a fluctuation of the amount of revenue, but no fluctuation in the rates of division between the cultivator and sovereign. Previously to a division of the produce of the land between the sovereign and the cultivators, a portion, defined by custom, is deducted for certain defined uses, such as the endowment of the district and village temples, fees of village officers, &c., amounting to about ten per cent. of the gross produce. The cultivators, who have the privilege of cultivating the lands to the exclusion of all other persons, are by custom entitled to retain $42\frac{1}{2}$ per cent. of the produce which remains after the deduction above referred to, and are bound to pay $57\frac{1}{2}$ per cent. as revenue.

Deducted for the endowment of the district and village temples, and fees of village officers, slaves, and labourers, previously to the division of the produce between the cultivator and sovereign........................ 10 per cent.

The cultivators retain $42\frac{1}{2}$ in every 90 of gross produce ... $38\frac{1}{2}$

Total retained out of the gross produce in this village, for the benefit of the village occupants	
<u> </u>	100

In the produce of lands not irrigated, the cultivators of this village retain the same share as from the produce of irrigated lands, with the benefit of the usual deductions as detailed in the account of the produce of rice lands. The cultivators, not original settlers, and having no claim to permanent possession of the land, retain by custom a larger portion than the original settlers, both in the produce of wet and dry land. They retain 56\frac{2}{3} per cent. of the produce of both kinds of land after the customary deductions; but they take no share in the produce of the village corporation lands, do not cultivate any portion of the appropriated lands, and pay a fee of superiority to the original settlers in the village.

The cultivators, who relinquish by custom so large a portion of the produce of the land as revenue to the state, possess advantages, as cultivators of land and village occupants, not capable of being accurately estimated, but of considerable value to the possessors. They divide among themselves the produce of the land exempted from revenue, granted when (to use their emphatic expression) the village was born; they are entitled to levy a fee of superiority from all cultivators not descendants of the original settlers: they can, by custom, sell, mortgage, or give away their village rights: they retain all the straw of all the land cultivated: they have an exclusive right to pasture all the uncultivated lands within the village boundaries: each of them holds, by custom, a moderate-sized garden, free from demands for revenue: they pay no house or poll-tax: they have the labour of the carpenter, blacksmith, potter, washerman, watcher, barber, herdsman, distributor of water to the fields, priests, &c., free of expense, or for a trifling annual donation in cloth or money.

The reservoir for watering the fields must be kept in repair by the sovereign or by his representative. When the cultivators are impoverished